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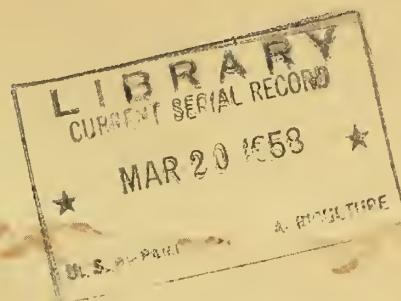
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FEDERAL - STATE - PRIVATE COOPERATIVE  
SNOW SURVEY and WATER SUPPLY FORECASTS  
for  
OREGON

UNITED STATES DEPARTMENT of AGRICULTURE  
SOIL CONSERVATION SERVICE  
and  
OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above  
in cooperation with other Federal, State and private organizations.

AS OF  
MAR. 1, 1958



# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

## PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
<b>RIVER BASINS</b>			
COLORADO, RIO GRANDE ..... AND PLATTE-ARKANSAS	MONTHLY (FEB.-MAY)	COLO. EXP. STATION	FT. COLLINS, COLO.
COLUMBIA <i>Includes Alaska</i> .....	MONTHLY (JAN.-MAY)		BOISE, IDAHO
UPPER MISSOURI .....	MONTHLY (FEB.-MAY)	MONT.AGR.EXP.STATION	BOZEMAN, MONTANA
WEST-WIDE .....	SEMI-ANNUALLY (OCT. 1 AND APR.1)	COOPERATORS	PORTLAND, OREGON
<b>STATES</b>			
ARIZONA .....	SEMI-MONTHLY (JAN. 15-APR.1)	SALT R. VALLEY WATER USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA .....	MONTHLY (FEB.-APR.)	NEVADA STATE ENGINEER	RENO, NEVADA
OREGON .....	MONTHLY (JAN.-MAY)	ORE.AGR.EXP.STATION	PORTLAND, OREGON
UTAH .....	MONTHLY (JAN.-MAY)	UTAH STATE ENGINEER UTAH AGR.EXP.STATION	SALT LAKE CITY, UTAH
WASHINGTON .....	MONTHLY (FEB.-MAY)	WASH. STATE DEPT. OF CONSERVATION AND DEVELOPMENT	SPOKANE, WASHINGTON
WYOMING .....	MONTHLY (FEB.-JUNE)	WYOMING STATE ENGINEER	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section  
Soil Conservation Service  
209 S.W. 5th Avenue, Portland 4, Oregon

## PUBLISHED BY OTHER AGENCIES

### OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA .....	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA .....	MONTHLY (FEB.-MAY)	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA



FEDERAL - STATE - PRIVATE COOPERATIVE  
**SNOW SURVEY and WATER SUPPLY FORECASTS**  
for  
**OREGON**

ISSUED

**MARCH 8, 1958**

*Report prepared by*

W. T. FROST, Snow Survey Supervisor

*and*

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*Issued by*

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SOIL CONSERVATION SERVICE

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DIRECTOR  
OREGON AGRICULTURAL  
EXPERIMENT STATION



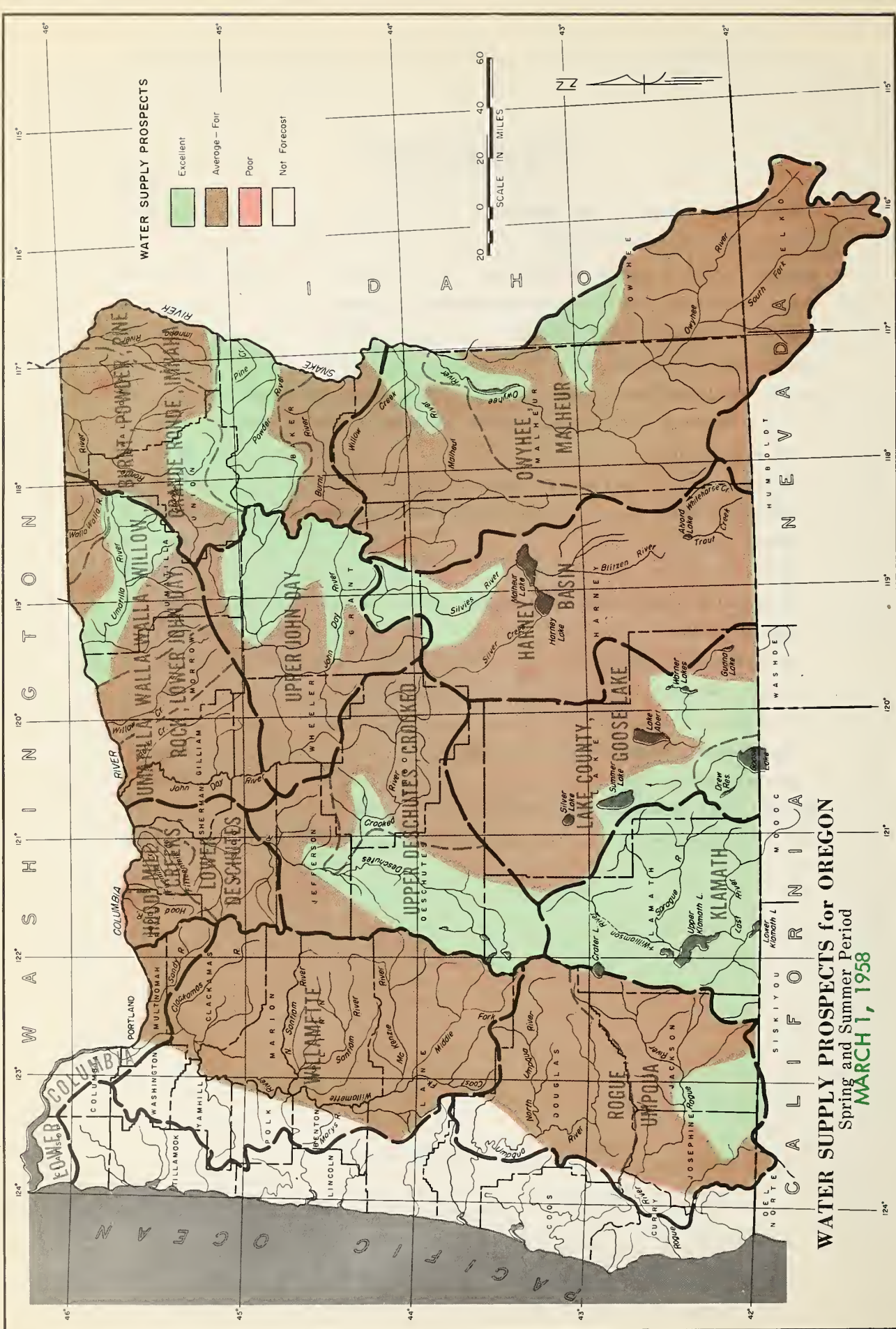




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# WATER SUPPLY OUTLOOK for OREGON

MARCH 1, 1958

Most irrigated lands in Oregon will have average or excellent water supplies this year in spite of unusually warm and rainy weather which has kept the snow in the higher elevations. Mountain snow-cover is mostly well above normal and reservoir water supplies are excellent.

## SNOW-COVER:

Statewide water content of the mountain snow-pack averages 107 percent normal compared with only 62 percent normal at this date last year. Snow-cover averages somewhat below normal in the northwest corner of the state but increases to above average to the east and south. Low elevation snow is conspicuously missing this year.

Snow accumulation this year has already reached on March 1st the total amount normally accumulated by April 1st. In a usual winter the state receives only 87 percent of the total winter snowfall by March 1st.

## SOIL-MOISTURE:

Watershed soils are well wetted under the mountain snow-cover in most areas of the state. Very little of the present snow-cover will be lost in "priming" the watershed soils.

## RESERVOIR STORAGE:

Stored water in 25 larger reservoirs is now 148 percent of the 15 year average and 99 percent of last year. Smaller reservoirs and stock ponds throughout the state are full or will fill.

## PRECIPITATION:

Statewide precipitation<sup>1</sup> averages 123 percent normal at 13 valley stations for the October-February period. February averaged 156 percent normal at these same stations.

## STREAMFLOW:

Forecasts of streamflow for the irrigation season are for near normal or better runoff. Extremes of high and low are represented by the Owyhee River which is forecast to flow 140 percent average and the Walla Walla and Clackamas Rivers which are expected to discharge 93 percent of average.

Discharge of many small streams that flow out of low-elevation watersheds is expected to fall off earlier than usual because of the absence of low-elevation snow. This condition can be improved by good early summer rains.

Discharge<sup>2</sup> of key Oregon streams during February has been extremely high with flow of the John Day River at Service Creek reaching 295 percent average. Flow of the John Day from October 1 to date has been 182 percent of the average.

<sup>1</sup>From preliminary data furnished by U.S. Weather Bureau, Portland, Oregon.

<sup>2</sup>From preliminary data furnished by U.S. Geological Survey, Portland, Oregon.



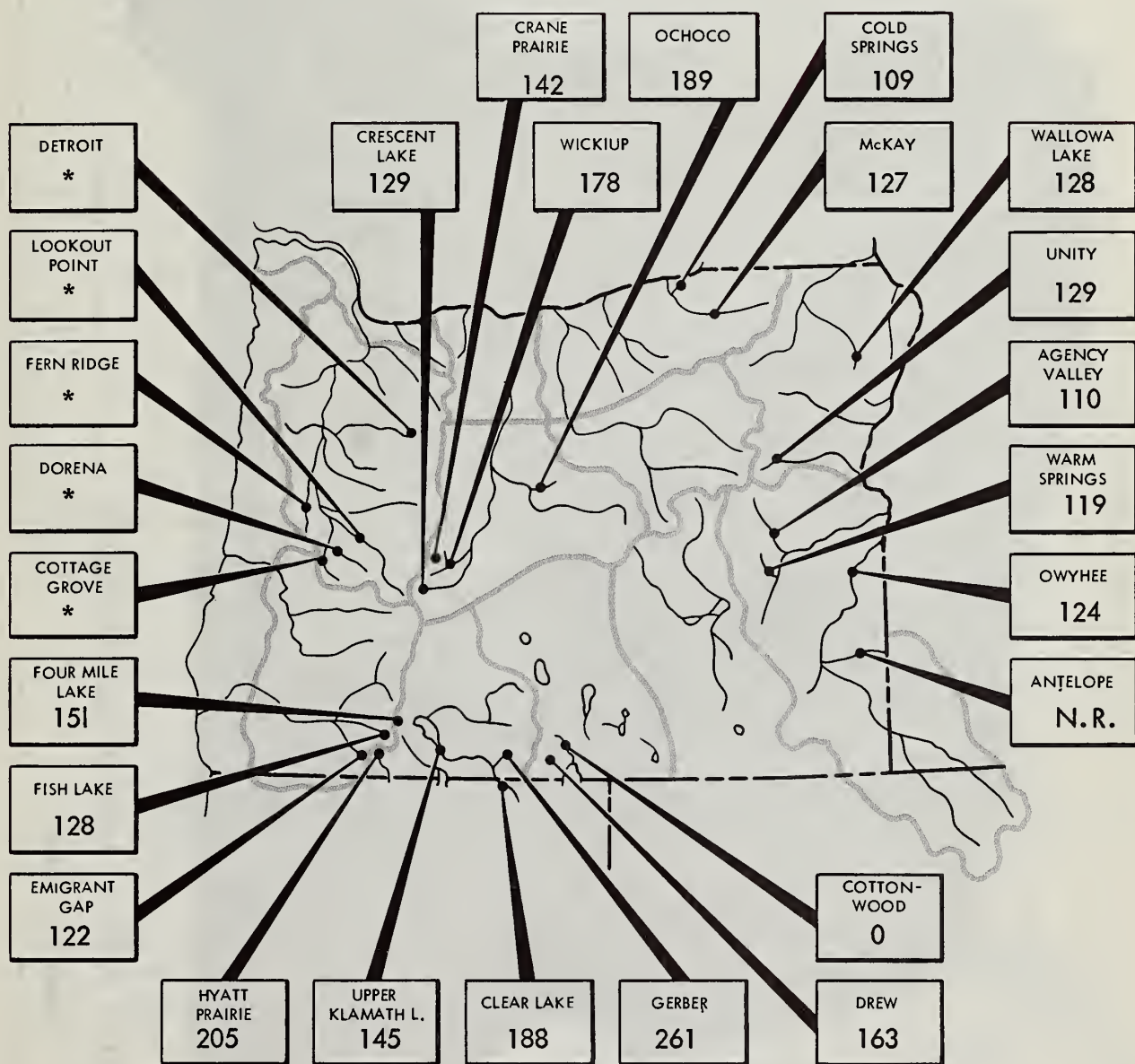
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# STORAGE STATUS of OREGON RESERVOIRS

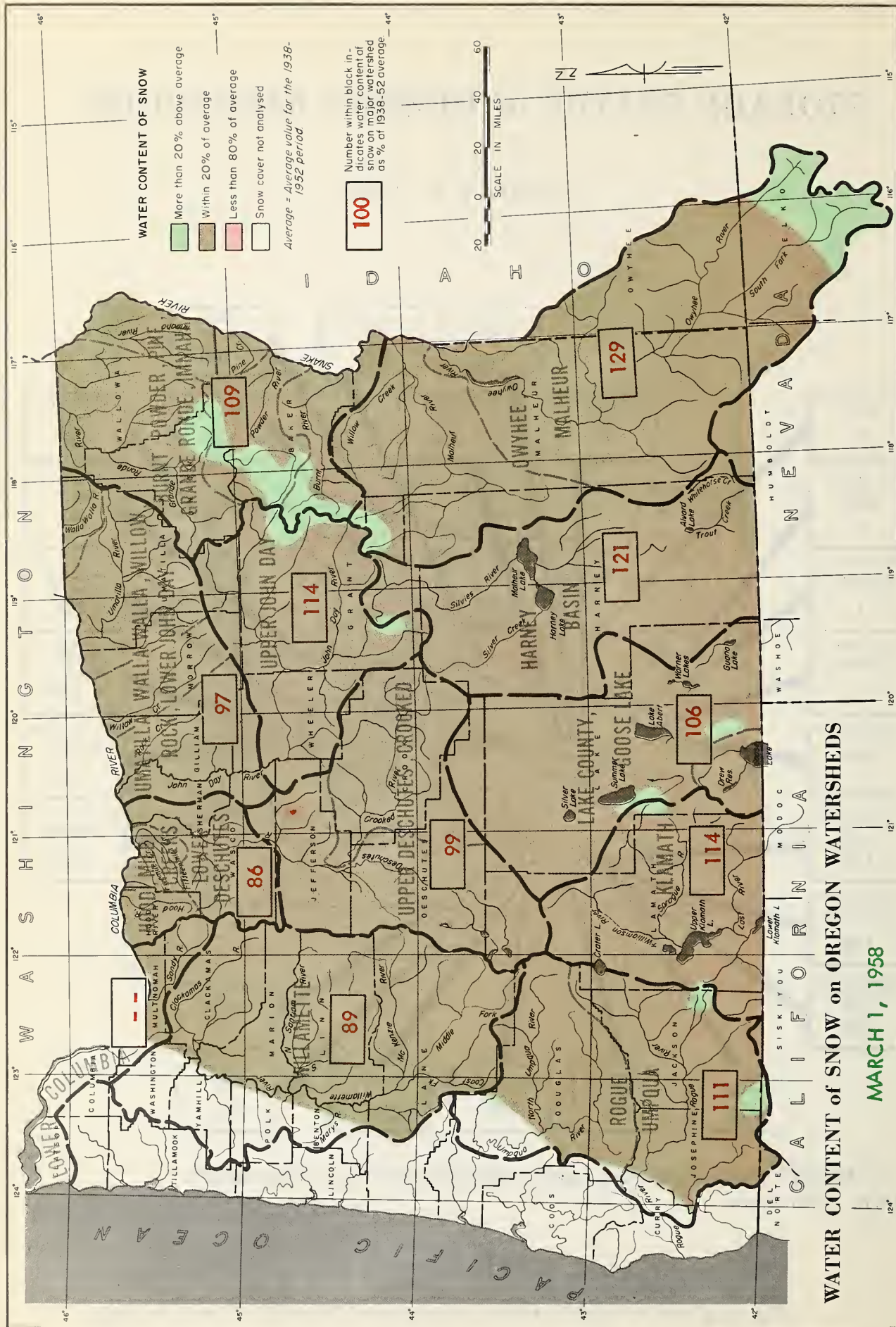
MARCH 1, 1958



\* - Multiple purpose reservoir - space reserved primarily for flood runoff.  
 N.R. - No report

Figures given are usable storage as percent of 1938-52, 15 year average.

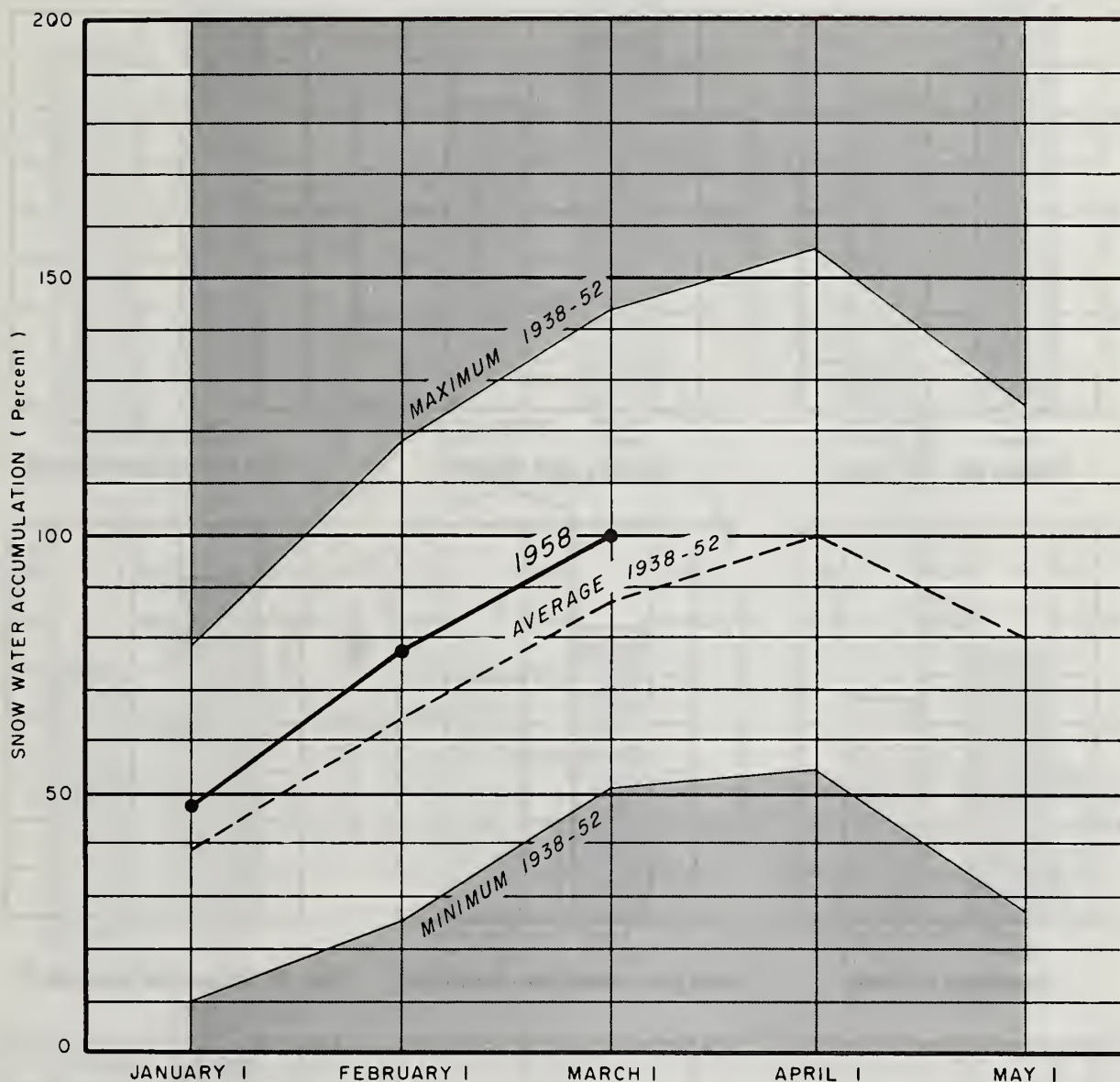






# SNOW WATER ACCUMULATION in OREGON

MARCH 1, 1958

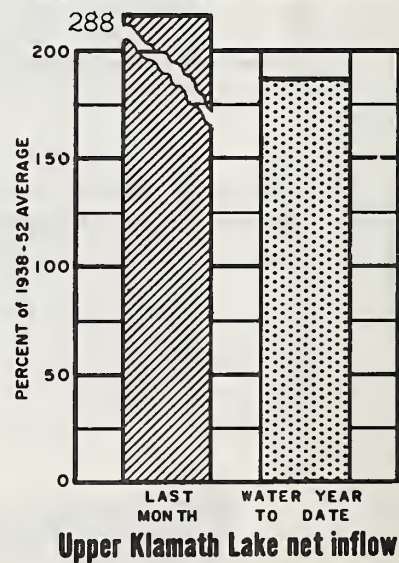
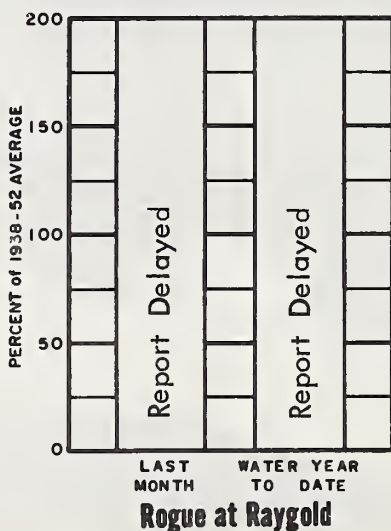
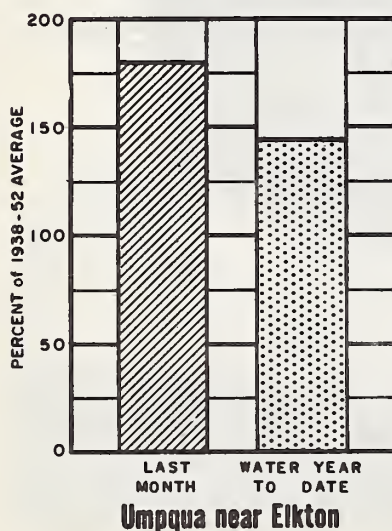
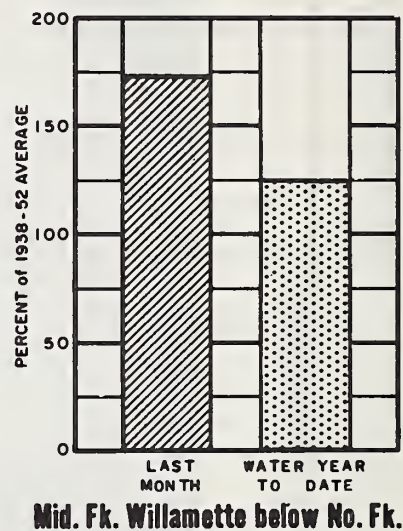
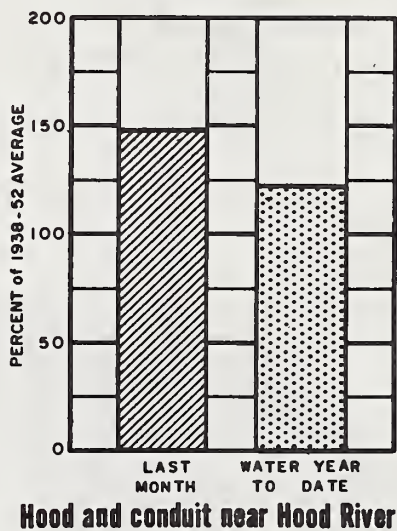
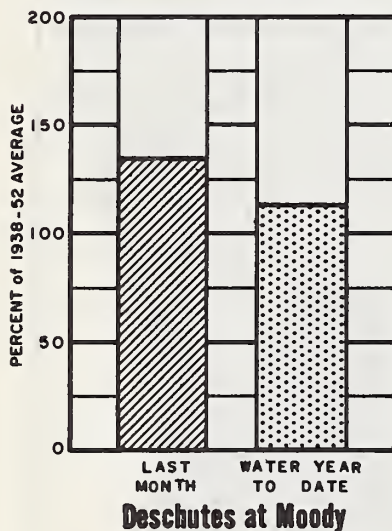
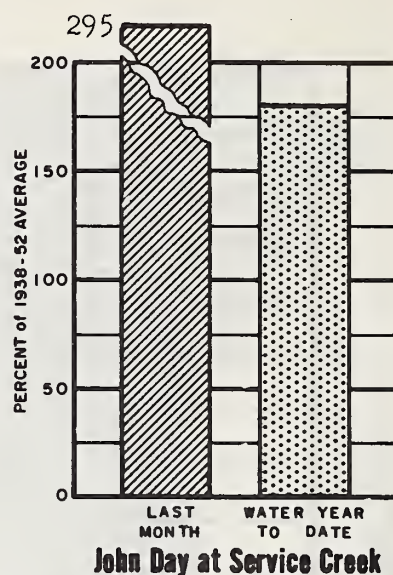
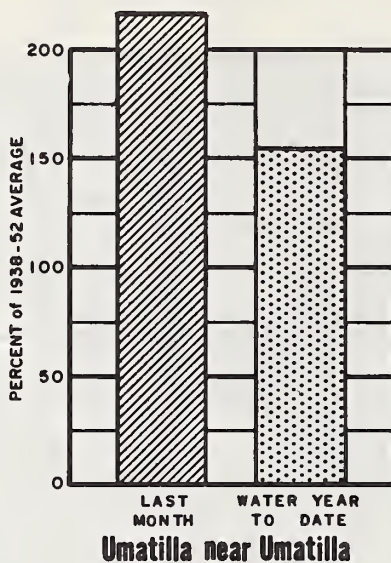
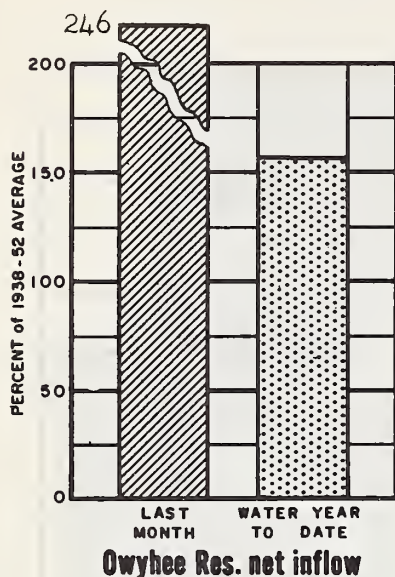


The accumulation of snow water was normal this month. Due to the above normal start in December and January, we now have a normal winter's snow accumulation; a month in advance of its usual occurrence.



# CURRENT OREGON STREAMFLOW

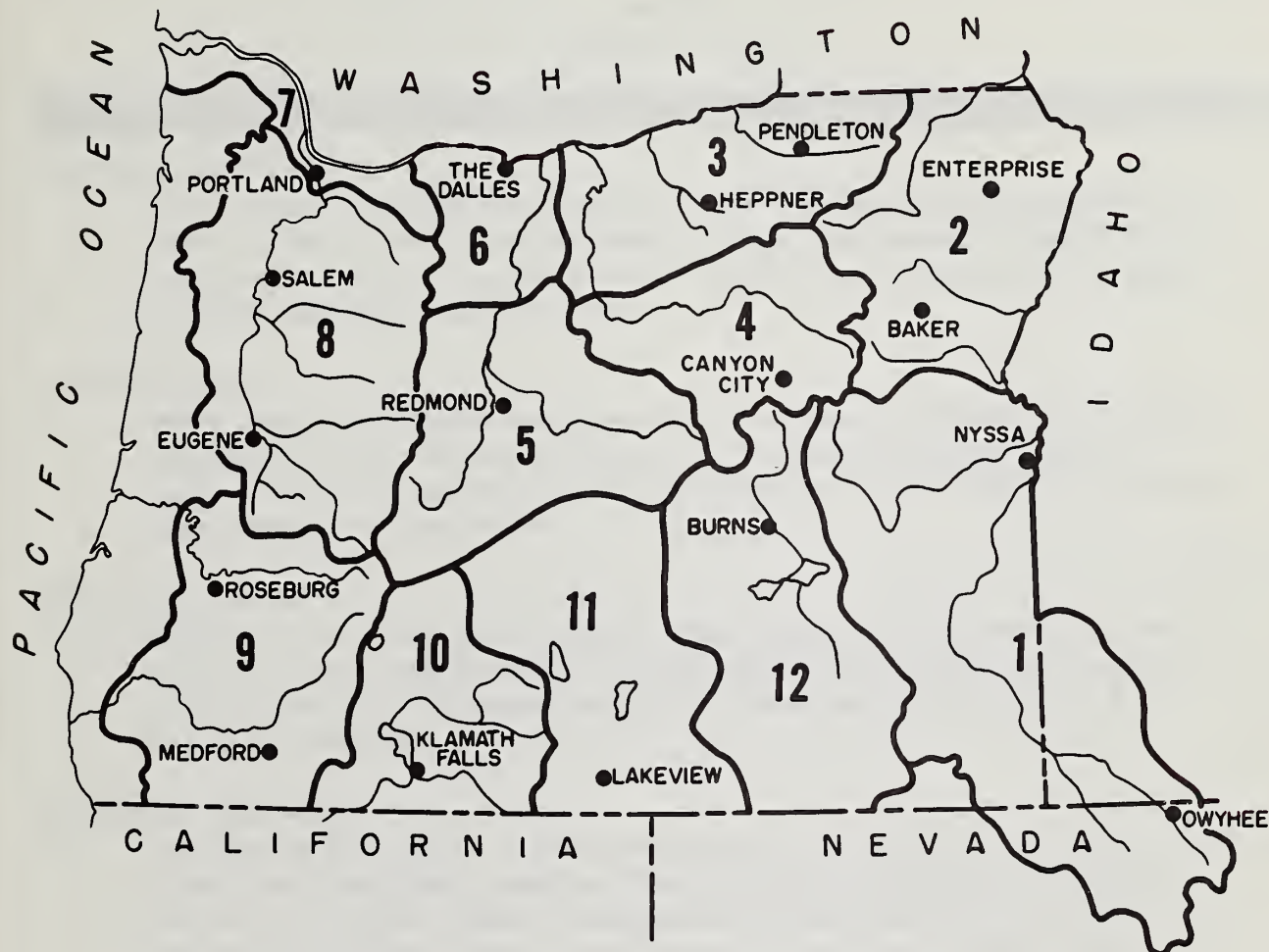
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# VALLEY PRECIPITATION in OREGON<sup>a</sup>

MARCH 1, 1958



## PRECIPITATION as PERCENT of the 1938-52 AVERAGE

STATION	LAST MONTH	WATER YEAR TO DATE <sup>b</sup>	STATION	LAST MONTH	WATER YEAR TO DATE <sup>b</sup>
Baker Apt.	95	230	Owyhee (Nev.)	c	
Burns	153	127	Pendleton Apt.	124	123
Canyon City	Station closed		Portland Apt.	98	87
Enterprise	c		Redmond Apt. *	143	105
Eugene Apt.	196	139	Roseburg Apt.	217	136
Heppner	c		Salem Apt.	121	106
Klamath Falls Apt.	127	167	The Dalles	143	120
Lakeview	156	120			
Medford Apt.	215	130			
Nyssa	186	128			

<sup>a</sup>Preliminary data furnished by the U.S. Weather Bureau. <sup>b</sup>Oct. 1 to date. <sup>c</sup>Report delayed.  
<sup>\*</sup>As percent of Redmond average.







# WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

*as of*

MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Above normal irrigation water supplies in Malheur County can be expected this season for lands served by larger streams. Many of the smaller streams have already made their early run and shortages can be expected in late season unless adequate June rains are received.

## SNOW-COVER

Water content of the mountain snow-pack is 129 percent of the 15 year average and double that of last year on March 1st. Abnormal temperatures and rain-storms combined to remove much low-elevation snow which would have provided better flows on smaller streams.

## SOIL-MOISTURE

Mid-winter snow-melt and rain-storms added moisture to the already wet watershed soils in the lower elevations. In the higher elevations the soils under the snow-pack are still only moderately wet with moisture penetrating only one foot in some locations.

## RESERVOIR STORAGE

The three large irrigation reservoirs of Owyhee, Warm Springs, and Agency Valley have stored water supplies 128 percent of the average and 99 percent last year at this date. There is no report on Malheur Lake (Willow Creek Reservoir No. 3) but most other small reservoirs and stock ponds are filled or will be filled soon.

## STREAMFLOW

Flow of the Owyhee River is expected to be 140 percent of its 15 year average for the April-September period. The March-July flow is forecast at 144 percent of average. The Malheur is expected to discharge 130 percent of its average. Discharge of Jordan Creek will be above average and should hold up well for late-season flow.

Spring flow of Bully Creek and other small tributaries of the Malheur has already been made and will fall off earlier than usual unless good June rains are received.

Report prepared by

W T Frost and Mones Borton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

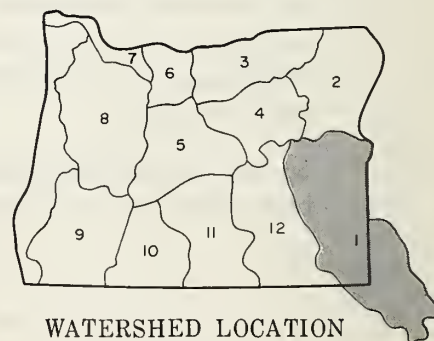
STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Boulder Creek	Excellent	Average	
Bully Creek	Average	Fair	
Cow Creek	Excellent	Average	
Jordan Creek	Excellent	Average	
Jordan Valley I.D.	Excellent	Average	
McDermitt Creek	Average	Average	
Oregon Canyon Creek	Average	Fair	
Owyhee Project	Excellent	Average	
Sucker Creek	Average	Average	
Ten Mile Creek	Average	Fair	
Vale, Oregon I.D.	Excellent	Average	
Warm Springs I.D.	Excellent	Average	
Willow Creek	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
1320	Malheur near Drewsey	107	April - Sept.	82	130
139	Malheur North Fork at Beulah <sup>e</sup>	83	April - Sept.	64	130
1234	Owyhee Reservoir net Inflow <sup>g</sup>	640	April - Sept.	458	140
		d	April - July	440	
		823	March - July	570	144

## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Agency Valley	60.0	42.1	41.6	38.2
Antelope	36.5	h		
Owyhee	715.0	639.3	632.0	513.7
Warm Springs	191.0	140.7	157.3	88.2

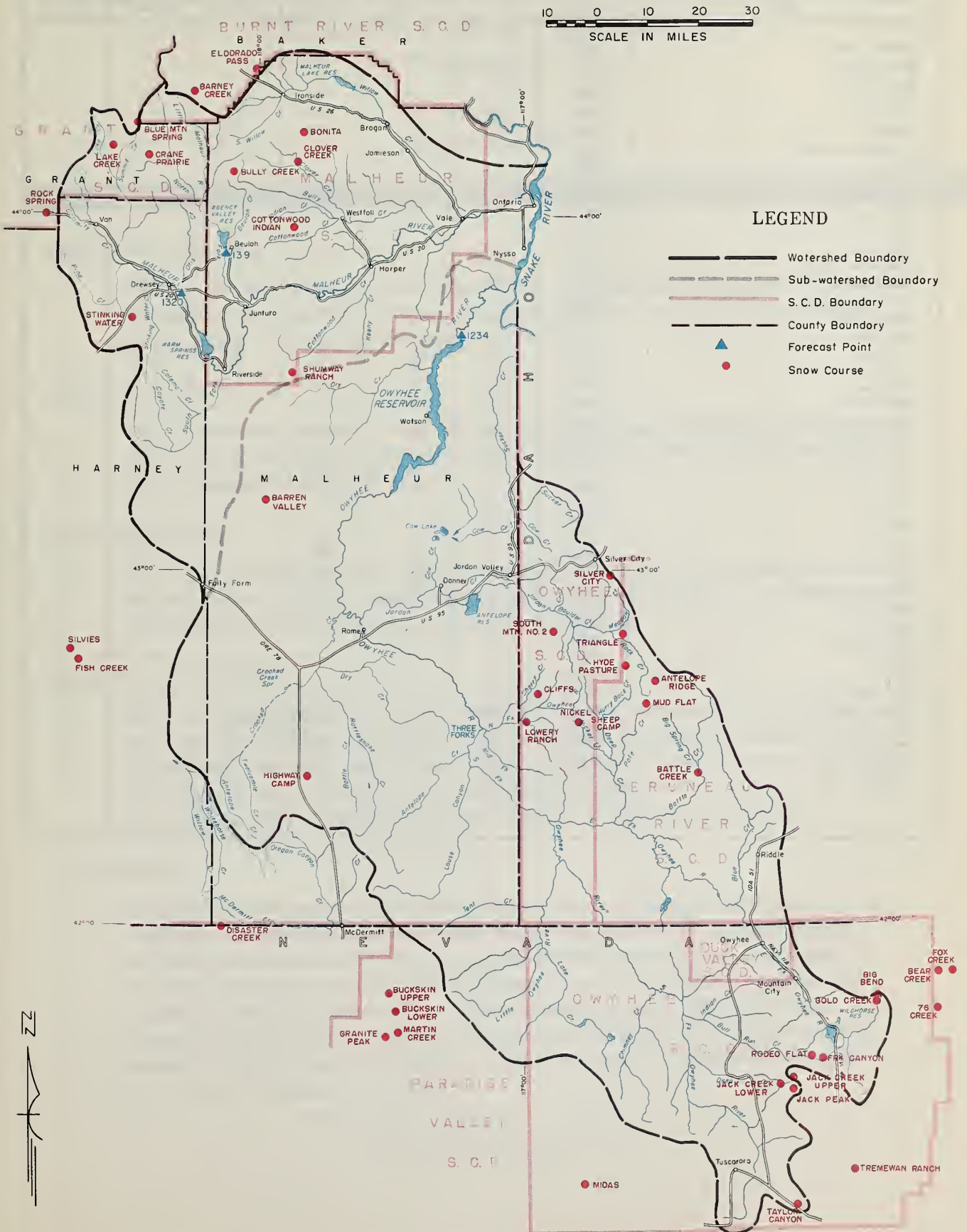


<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> From USBR records of inflow <sup>h</sup> Report delayed.



# OWYHEE, MALHEUR WATERSHEDS





**SNOW**

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL <sup>b</sup>	
Antelope Ridge	5500	h					
Borney Creek	5950	2-21	28	9.2	5.1	8.3	8
Borren Volley	4200	2-27	0	0.0	--	--	0
Bottle Creek <sup>f</sup>	5700	2-27	20	6.6	--	--	0
Beor Creek	7800	2-27	69	18.3	16.5	17.1	15
Big Bend	6700	2-25	40	12.6	5.6	9.4	15
Blue Mountain Springs	5900	2-21	56	19.5	11.8	14.9	15
Bonito	4600	h					
Buckskin, Lower	6700	2-25	27	9.7	5.9	8.9	12
Buckskin, Upper	7200	2-25	38	14.2	5.4	9.9	12
Bully Creek <sup>f</sup>	5300	2-27	18	6.0	--	--	0
Cliffs	5200	h					
Clover Creek	4100	2-23	8	2.3	--	--	0
Cottanwood - Indian <sup>f</sup>	4320	2-27	0	0.0	--	--	0
Crone Proirie	5375	2-20	39	12.9	4.7	9.6	14
Disoster Peak	6500	h					
Eldorado Pass	4600	2-28	5	1.9	0.0	--	0
Fish Creek	7900	d					
Fox Creek	6800	2-27	34	9.9	5.9	8.8	15
Fry Canyon	6700	2-25	34	12.4	3.8	9.0	15
Gald Creek	6600	2-25	29	9.4	4.1	6.3	14
Gronite Peak	7800	2-26	49	14.2	12.2	11.2	15
Highway Comp	4300	h					
Hyde Posture <sup>f</sup>	5800	2-27	27	9.0	--	--	0
Jack Creek, Lower	6800	3-1	27	8.7	0.0	4.0	15
Jack Creek, Upper	7250	3-1	48	17.0	8.6	9.6	14
Jack Peak	8420	3-1	103	33.4	20.0	--	0
Lake Creek	5120	2-19	47	15.8	7.1	10.7	14
Lowry Ranch	4800	h					
Martin Creek	7200	2-25	27	9.1	6.5	8.6	15
Midas	5700	2-27	19	6.1	1.7	5.2	12
Mud Flat	5500	2-27	29	8.0	--	--	0
Nickel Sheep Camp <sup>f</sup>	5450	2-27	11	3.6	--	--	0
Rock Springs	5100	2-25	22	7.3	2.5	6.3	15
Rodeo Flat	6800	2-25	38	13.9	5.4	9.9	15
Shumway Ranch	4400	2-27	0	0.0	--	--	0
Silver City	6400	3-2	42	16.4	12.9	15.2	7
Silvies	6900	d					
South Mountain Na 2	6340	2-25	32	11.7	9.4	11.9	13
Stinking Water	4800	2-25	8	2.1	--	4.7	14
Taylor Canyon	6200	3-1	20	7.2	0.0	5.4	15
Tremewan Ranch	5700	2-27	6	1.5	0.0	2.2	15
Triangle	5150	2-27	3	1.0	--	--	0
76 Creek	7100	2-27	49	14.7	7.4	12.3	6



# WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

The outlook for irrigation water supplies in Northeastern Oregon continues to be favorable. Average to excellent flows are expected during the spring period and average flows during the summer months.

## SNOW-COVER

The mountain snow-pack is now 109 percent of average and 143 percent of last year. Snow has begun to melt at some of the lower courses such as Meacham, Schoolmarm, and Eldorado Pass.

## SOIL-MOISTURE

Warm temperatures accompanied by rain during February have added additional moisture to the already moderately wet soils under the snow. Accordingly, less of the snow water will go into the soil to "prime" it.

## RESERVOIR STORAGE

Flow into Unity Reservoir has increased during the past two months with the reservoir now holding 12,400 acre feet compared to 5,800 on January 1. Little runoff has occurred in the Wallowa above Wallowa Lake Reservoir where 25,300 acre feet are now in storage compared to 24,500 last month. The two reservoirs are now 128 percent of average and 57 percent of capacity.

## STREAMFLOW

Streamflow forecasts vary from near normal to above normal in the area. The Wallowa County streams should have flows ranging from 91 percent normal on Hurricane Creek to 98 percent normal on the Lostine River. Estimates for the Grande Ronde at La Grande have been lowered from those reported last month but should be adequate at 93 percent of average. The Burnt near Hereford and Powder near Baker are forecast at 110 and 119 percent average respectively, for April-September. Catherine Creek is forecast at 76,000 acre feet or 113 percent average.

*Report prepared by*

W T Frost and Manes Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Alder Slope	Average	Average	
Baker Valley	Excellent	Average	
Big Creek	Average	Average	
Clover Creek	Average	Average	
Cave	Average	Average	
Durkee	Average	Average	
Eagle Valley	Excellent	Average	
Elgin	Average	Average	
Enterprise - Joseph	Average	Average	
Hereford - Bridgeport	Average	Average	
Imnaha River	Average	Average	
LaGrande - Island City	Average	Average	
Lastine - Wallowa	Average	Average	
North Powder River - Wolf Creek	Excellent	Average	
Pine Valley	Excellent	Average	
Powder River - Elk Creek	Excellent	Average	
Summerville	Excellent	Average	
Sumpter Valley	Excellent	Average	
Union - Hot Lake	Excellent	Average	
Unity	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

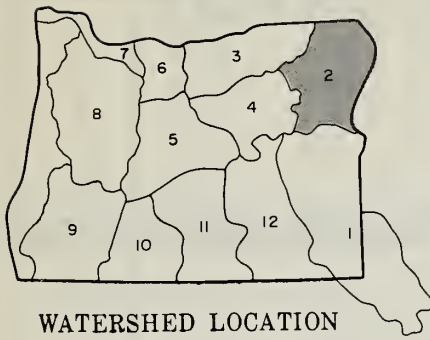
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
1815	Bear near Wallowa	67	April-Sept.	69	97
143	Burnt near Hereford <sup>e</sup>	46	April-Sept.	42	110
185	Catherine near Union	80	April-Sept.	71	113
1816	Grande Ronde at LaGrande	165	April-Sept.	177	93
1814	Hurricane near Joseph	41	April-Sept.	45	91
172	Imnaha at Imnaha	285	April-Sept.	303	94
1810	Lostine near Lostine	121	April-Sept.	124	98
152	Powder near Baker	75	April-Sept.	63	119
		73	April-July	62	118
1822	Wallowa East Fork near Joseph <sup>e</sup>	10.8	April-Sept.	11.3	96
		8.7	April-July	9.2	95

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> Report delayed.



# BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



10 0 10 20 30  
SCALE IN MILES



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Unity	25.2	12.4	15.4	9.6*
Wallowa Lake	40.9	25.3	34.3	19.8

\*1938 excepted

## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- Forecast Point
- Snow Course



SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>d</sup>	
Aneroid Lake No.1	7480	2-23	81	30.6	27.4	31.4	9
Aneroid Lake No.2	7000	2-23	59	22.0	21.0	25.0	9
Anthony Lake	7125	2-24	67	26.0	23.5	24.3	13
Borney Creek	5950	2-21	28	9.2	5.1	8.3	8
Beaver Reservoir	5340	2-28	31	9.9	7.4	10.5	13
Blue Mountain Summit	5098	2-26	32	10.7	5.4	9.0	15
Bourne	5800	2-20	61	20.2	12.8	15.6	14
Camp Corson	5970	d					
County Line	4800	2-26	13	4.2	--	--	1
Dooley Mountain	5430	2-24	33	12.4	4.6	9.3	14
Eilertson Meadows	5400	2-22	43	14.3	8.2	11.5	14
Eldorado Pass	4600	2-28	5	1.9	0.0	--	0
Gold Center	5340	2-20	46	15.0	7.8	12.3	13
Goodrich Lake	6775	g					
Lucky Strike	5050	2-26	40	14.1	6.9	12.1	14
Meocham	4300	2-25	20	7.7	7.2	9.3	15
Moss Springs	5850	2-28	66	28.3	21.2	21.0	14
Schneider Meadows	5400	2-25	93	37.2	24.7	--	2
Schoolmarm	4775	2-26	9	3.0	4.2	4.6	6
Summit Springs	6000	d					
Taylor Green	5740	d					
Tipton	5100	2-21	44	14.4	7.0	11.5	8
Tollgate	5070	2-25	64	26.2	17.5	25.6	14



# WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Umatilla, Morrow, and Gilliam County streams will provide adequate irrigation water supplies this coming spring and summer. Snow has been melting at the moderate elevations and this, plus rain, has produced quite a bit of streamflow already.

## SNOW-COVER

During February water content of snow increased only slightly at the higher elevations. Below 4500 feet the snow melt has begun. However, snow water remains 97 percent of average. Snow water content is now 150 percent of last year at this date.

## SOIL-MOISTURE

The mountain soils are very well wetted. Little of the present snow cover will be lost to soil "priming".

## RESERVOIR STORAGE

McKay and Cold Springs Reservoirs have filled considerably during the last two months. Starting from 18,100 acre feet on January 1, McKay has increased to 57,600 as of March 1. During this same period Cold Springs has increased from 22,000 to 44,000 acre feet. Currently the two reservoirs are 119 percent of average and considerably ahead of last year.

## STREAMFLOW

The major streams, Umatilla, Walla Walla and McKay, are forecast to have normal flows. Birch, Butter, Willow, Rhea and Rock Creeks will have good average spring and early summer flows. Adequacy of their late summer flows will depend in part on summer rains. Both McKay and Cold Springs Reservoirs will fill.

Report prepared by

W. T. Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon







# WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

*as of*

MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

The water supply outlook in the Upper John Day watershed area is still quite satisfactory in spite of unusually warm February weather which brought rains instead of snow at lower elevations. This outlook assumes that normal winter conditions will prevail during March. If temperatures continue much above normal, snow-melt will be much earlier than usual and will result in below normal late season streamflow.

## SNOW-COVER

Water content of the snow-pack is now 14 percent above the usual March 1 accumulation and 68 percent greater than at this date last year. Although the snow-pack normally increases from February to March, it actually decreased at 2 snow courses out of the 15 measured this month. These were Schoolmarm and Marks Creek at elevations less than 4800 feet where rain was received instead of snow. At high stations the water content of snow increased in a near normal manner. At Olive Lake, water content increased from 17.3 inches to 21.8 inches.

## SOIL-MOISTURE

Mid-winter rainfall and snow-melt have increased moisture penetration in the soils to a satisfactory degree except in the Blue Mountain Summit area where soils are still relatively dry below the two foot level.

## STREAMFLOW

Normal or above normal streamflow is forecast for the larger streams in this area for the April-September period. Late season flows of Fox and Long Creeks in Grant County, Mountain and Bridge Creeks in Wheeler County, and Cherry Creek in east Jefferson County, are expected to be below normal.

Report prepared by

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U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Beech Creek	Average	Average	
Beech Creek-Fox-Long Creek	Average	Fair	
Bridge-Mountain Creeks	Average	Fair	
Comas Creek	Average	Average	
Cherry Creek	Average	Fair	
Indion-Pine Creeks	Average	Average	
John Day River, Main Fork	Excellent	Average	
John Day River, Mid. Fork	Excellent	Average	
John Day River, North Fork	Excellent	Average	
John Day River, South Fork	Average	Average	
Monument-Kimberly	Average	Average	
Strawberry Creek	Excellent	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
2415	John Day at Prairie City	54	April-Sept.	50	108
		49	April-July	45	109
2433	John Day, Mid. Fork at Ritter	132	April-Sept.	122	108
2432	John Day, North Fork near Dole	268	April-Sept.	248	108
2434	Strawberry near Proirie City	8.8	April-Sept.	8.3	106

## SNOW

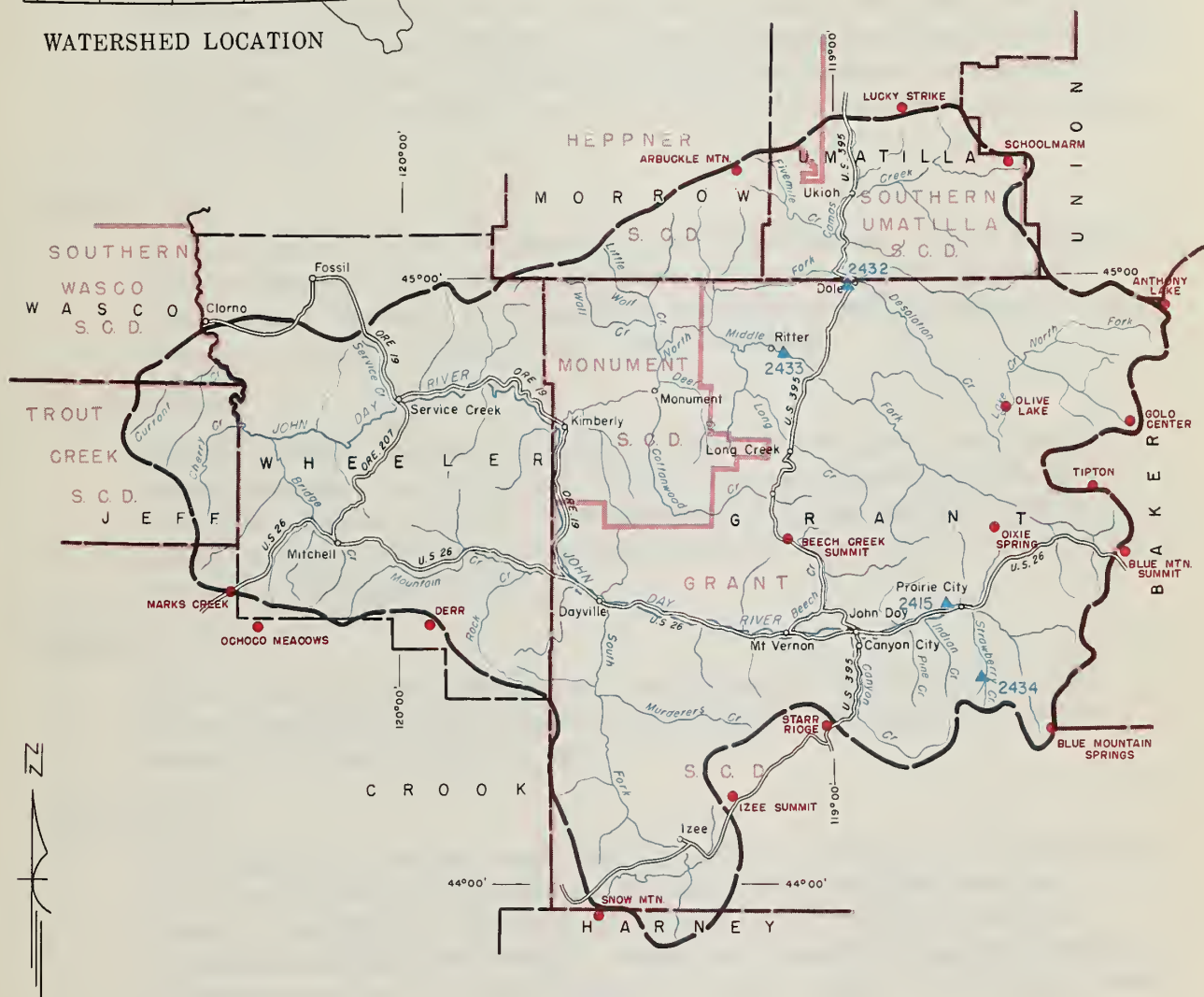
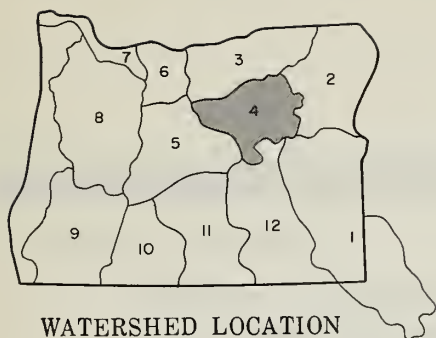
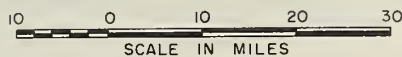
SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>d</sup>	
Anthony Loke	7125	2-24	67	26.0	23.5	24.3	13
Arbuckle Mountoin	5400	2-26	31	12.6	5.8	11.2	11
Beech Creek Summit	4800	2-21	16	5.7	2.6	6.2	15
Blue Mountain Springs	5900	2-21	56	19.5	11.8	14.9	15
Blue Mountain Summit	5098	2-26	32	10.7	5.4	9.0	15
Derr	5670	2-24	25	8.9	4.8	-	0
Dixie Springs	6650	d					
Gold Center	5340	2-20	46	15.0	7.8	12.3	13
Izee Summit	5293	2-24	31	10.9	5.0	8.2	15
Lucky Strike	5050	2-26	40	14.1	6.9	12.1	14
Marks Creek	4540	2-25	6	1.6	0.4	5.0	15
Ochoco Meadows	5200	2-25	35	12.1	4.5	10.9	15
Olive Loke	6000	2-25	58	21.8	15.4	17.0	15
Schoolmarm	4775	2-26	9	3.0	4.2	4.6	6
Snow Mountain	6300	d					
Starr Ridge	5156	2-24	19	6.4	3.3	5.8	15
Tipton	5100	2-21	44	14.4	7.0	11.5	8

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.



# UPPER JOHN DAY WATERSHEDS



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course







# WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Deschutes, Crook and Jefferson County lands served by Deschutes and Crooked River streams will have excellent to average irrigating water supplies this spring and summer. However, those lands not served from reservoirs and served by streams heading in moderate elevations will have less adequate supplies during the late summer.

## SNOW-COVER

Water content of snow is 99 percent of the 15 year average. Lower elevation snow has begun to melt, particularly in the Ochoco Creek and Newberry Crater areas. However, it is typical for the peak accumulation of snow water to occur by March 1 in the Ochoco Creek watersheds.

## SOIL-MOISTURE

Readings taken on February 25 at the electronic soil moisture station at the Marks Creek snow course indicate that the moisture has penetrated the soil to depths in excess of 3 feet. Most mountain soils under the snow-pack in the Upper Deschutes and Crooked watersheds are well wetted and will have a favorable effect upon runoff.

## RESERVOIR STORAGE

The four major reservoirs in the area are 160 percent of average. All will fill to capacity before the irrigation season begins. Stock ponds and small reservoirs in Crook County are full.

## STREAMFLOW

April-September forecasts range from 120 percent of average on the Deschutes below Snow Creek to 93 percent of average on the Little Deschutes near Lapine. Crooked River near Post and net inflow to the Ochoco Reservoir is forecast at 100 percent average. Water users served by irrigation districts will have excellent to average spring season water supplies and average summer supplies.

Report prepared by

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U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Arnold I. D.	Average	Average	
Bear Creek	Average	Average	
Beaver Creek	Average	Average	
Camp Creek	Average	Average	
Central Oregon I. D.	Excellent	Average	
Crooked River	Average	Average	
Deschutes River	Excellent	Average	
Hay-Trout Creeks	Average	Average	
Lone Pine I. D.	Average	Average.	
Mill Creek	Average	Average	
North Unit I. D.	Excellent	Average	
Ochoco Creek	Average	Average	
Ochoco I. D.	Excellent	Average	
Sisters I. D.	Excellent	Average	
Snow Creek I. D.	Average	Average	
Squaw Creek I. D.	Excellent	Average	
Swalley Ditch	Excellent	Average	
Tumalo Project	Excellent	Average	
Walker Basin I. D.	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

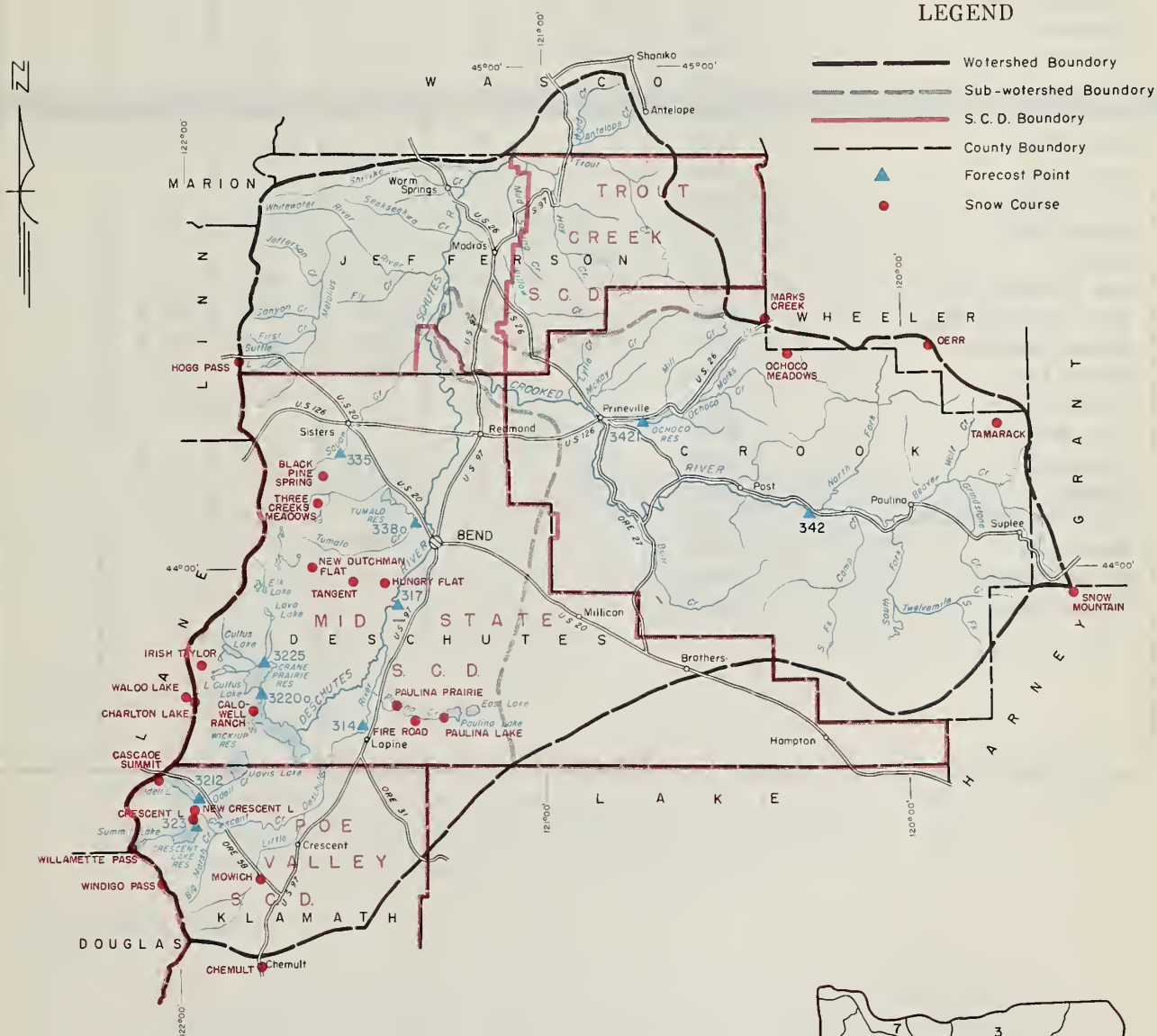
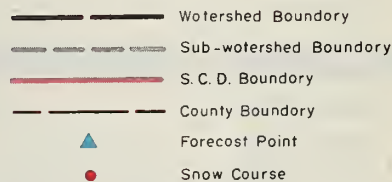
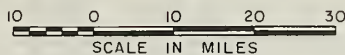
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
3220a	Crane Prairie Reservoir net inflow	136	April - Sept.	121	112
323	Crescent at Crescent Lake <sup>e</sup>	21	April - Sept.	21	100
342	Crooked near Post	124	April - Sept.	124 <sup>g</sup>	100
317	Deschutes at Benham Falls <sup>e</sup>	525	April - Sept.	511	103
		360	April - July	346	104
3225	Deschutes below Snow Creek	72	April - Sept.	60	120
314	Deschutes, Little near Lapine <sup>e</sup>	84	April - Sept.	90	93
		74	April - July	79	94
3421	Ochoco Reservoir net inflow	28	April - Sept.	28	100
3212	Odell near Crescent	29	April - Sept.	29	100
335	Squaw near Sisters	57	April - Sept.	49	116
338a	Tumalo near Bend <sup>e</sup>	55	April - Sept.	48	115

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1938-39 excepted. <sup>h</sup> Report delayed.

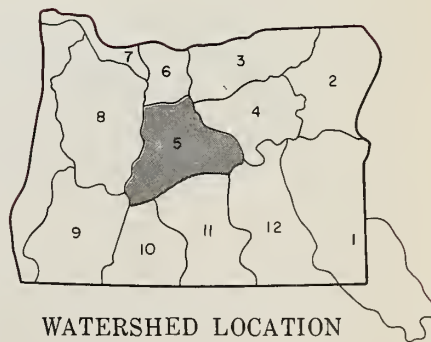


# UPPER DESCHUTES, CROOKED WATERSHEDS



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Crane Prairie	55.3	52.6	56.0	37.0
Crescent Lake	68.0	57.7	65.5	48.9*
Ochoco	46.0	***41.5	28.6	22.0
Wickiup	200.0	187.8	200.0	105.6**



\*1951 excepted.      \*\*1938-42 excepted.      \*\*\*Feb. 22, 1958.



# Upper Deschutes, Crooked Watersheds

## SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL <sup>d</sup>	
Block Pine Spring	4600	2-19	12	3.0	2.8	--	1
Coldwell Ranch	4400	d					
Cascade Summit	4880	2-26	83	28.8	18.8	32.0	8
Charlton Lake	5750	d					
Chemult	4760	2-25	37	12.8	3.8	11.3	15
Crescent Lake	4760	2-25	43	17.6	6.0	--	0
Derr	5670	2-24	25	8.9	4.8	--	0
Fire Road	5050	2-21	21	7.8	3.1	--	0
Hogg Pass	4755	2-25	96	40.5	27.5	39.8	12
Hungry Flat	4400	2-20	21	7.5	3.0	--	1
Irish-Taylor	5500	d					
Morks Creek	4540	2-25	6	1.6	0.4	5.0	15
Mowich	4700	2-25	13	4.2	3.1	--	0
New Crescent Lake	4800	2-25	50	17.2	7.4	--	1
New Dutchman Flot	6400	2-20	131	53.4	35.9	53.9	5
Ochoco Meadows	5200	2-25	35	12.1	4.5	10.9	15
Paulino Lake	6330	2-21	59	22.3	15.6	--	0
Paulino Proirie	4285	2-21	0	0.0	0.0	--	0
Snow Mountoin	6300	d					
Tomarock	4800	2-25	21	7.3	1.8	6.3	9
Tongent	5400	2-20	78	27.5	9.4	--	1
Three Creeks Meadows	5600	2-19	54	22.6	9.8	22.3	6
Waldo Lake	5500	d					
Willamette Poss	5600	h					
Windigo Poss	5800	h					



# WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION  
GENERAL OUTLOOK

The water supply outlook for Hood River Valley and Wasco County lands is fairly satisfactory at this time but the smaller streams, fed from moderate to low-elevation watersheds, need more snow to assure satisfactory water supplies.

## SNOW-COVER

Water content of the snow-pack is considerably greater than last year at the higher elevations. However, the moderate elevations carry a much lighter snow-cover and at lower elevations the snow is completely gone. March will need to bring much snow at moderate elevations to assure satisfactory water in the smaller streams.

## SOIL-MOISTURE

Mid-winter rain-storms and snow-melt have added moisture to soils in the upper watersheds. The watershed soils are therefore wet enough to favor a satisfactory runoff from snow-melt.

## STREAMFLOW

Forecasts for Hood River and White River have been reduced slightly, due to reduction in snow-cover, but flow of these streams will be about equal to the 15 year average. Discharge of Mill Creek, the Mile Creeks, Badger, Rock and Gate Creeks is expected to be somewhat less than average.

Report prepared by

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U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Aldridge Ditch	Average	Fair	
Badger Creek	Average	Fair	
Dee I. D.	Average	Average	
East Fork I. D.	Average	Average	
Farmers I. D.	Average	Average	
Glacier I. D.	Average	Average	
Hood River	Average	Average	
Juniper Flat	Average	Fair	
Middle Fork I. D.	Average	Average	
Mile Creek	Average	Fair	
Mill Creek	Average	Fair	
Mount Hood I. D.	Average	Average	
Rock-Gate-Threemile Creeks	Average	Fair	
Tygh Creek	Average	Fair	
White River	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
437	Hood near Hood River <sup>e</sup>	310	April-Sept.	306	101
		265	April-July	260	102
438	Hood, West Fork near Dee	148	April-Sept.	147	101
		128	April-July	127	101
3613	White below Tygh Valley	152	April-Sept.	152	100
		135	April-July	135	100

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>d</sup>	
Brooks Meadows	4300	d					
Clear Lake	3500	2-24	12	4.8	7.3	13.1	10
Greenpoint Reservoir	3400	2-20	24	10.8	11.0	--	4
Phlox Point	5600	2-26	157	64.3	34.3	53.3	14
Red Hill	4400	2-23	77	35.3	25.6	56.4	5
Still Creek	3700	2-27	56	17.8	13.8	21.3	15
Tilly Jane	6000	2-16	118	45.1	--	50.1	5

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.



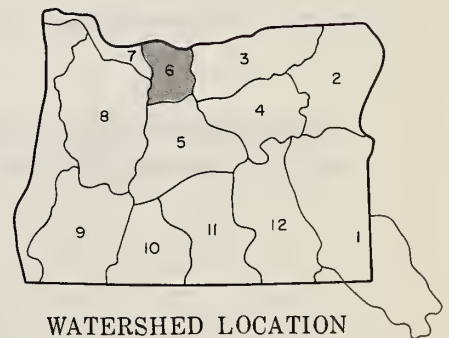
# HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

10 0 10 20  
SCALE IN MILES



## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- - - S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course









# WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

*as of*

MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Snowfall throughout Columbia Basin for the first part of February was heavy, but fell far short of normal for the remainder of the month. In general, the water content of the snow-pack dropped significantly during the month. The flow of the Columbia at The Dalles is forecast to be slightly below the 1938-52 fifteen year average.

## SNOW-COVER

The snow-pack on the Columbia River watersheds has dropped to 94 percent of the normal for March 1 as computed from the weighted contribution of each major river.

## SOIL-MOISTURE

The relatively dry soil moisture conditions beneath the snow-pack were changed slightly by the rains at lower elevations, but the overall soil moisture status for the major contributing rivers in Columbia Basin has not changed.

## RESERVOIR STORAGE

Storage in irrigation reservoirs remains well above normal. In some cases, stored water is being released from multiple-purpose reservoirs. In general, the operation is planned to give maximum results for flood control, power, and irrigation use.

## STREAMFLOW

Forecasts of the flow of Columbia River at The Dalles, assuming normal conditions for the remainder of the season are as follows:

April through June	62,500,000 acre feet or 95 percent average
April through September	92,500,000 acre feet or 95 percent average

Report prepared by

W. T. Frost and Mones Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon



The snow cover figures for the major Columbia tributaries do not vary as much as in the earlier months because there are more measurements taken and the courses have a longer period of record.

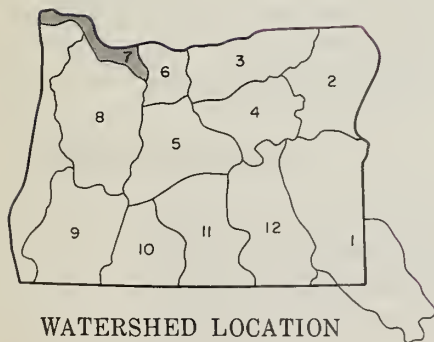
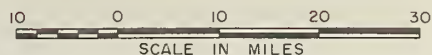
The snow water compared to normal is as follows:

Upper Columbia (including the Kootenai) —————	95 percent
Pend Oreille —————	103 percent
Clearwater —————	101 percent
Salmon —————	92 percent
Snake at Weiser —————	94 percent
Spokane —————	113 percent
Yakima —————	80 percent
Okanogan —————	84 percent

Information furnished by  
M. W. Nelson  
Soil Conservation Service  
Boise, Idaho



# LOWER COLUMBIA WATERSHEDS



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- River Miles







# WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Willamette Valley lands served from streams heading high in the Cascades will have adequate water supplies this irrigation season. Many streams heading at moderate elevations in the Cascades will have smaller flows than usual due to the frequent occurrence of rain rather than snow this winter.

## SNOW-COVER

Water content of the snow on the Willamette Basin snow courses is 89 percent of average and 142 percent of last year. There is very little snow below 3500 feet and below about 4800 feet the water content of the snow is below normal.

## SOIL-MOISTURE

Mountain soils have continued to increase in moisture content. These well wetted soils will have an important favorable effect on runoff.

## RESERVOIR STORAGE

The five multiple purpose reservoirs currently hold 62 percent of last year. Ample water should be available to fill them when the present high water potentials diminish.

## STREAMFLOW

Forecasts of April-September streamflow range from 116 percent average for the McKenzie near Vida to 91-94 percent of average on the Clackamas River forecast stations. Flow during February was above normal on most Willamette Valley streams.

Report prepared by

W T Frost and Manes Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Calapooya	Average	Average	
Clackamas	Average	Average	
McKenzie	Excellent	Average	
Mollalla	Average	Average	
Santiam, North	Average	Average	
Santiam, South	Average	Average	
Willamette, Coast Fork	Average	Average	
Willamette, Middle Fork	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
5911	Clackamas at Big Bottom	150	April-Sept.	164	91
		121	April-July	133	91
593	Clackamas near Cazadero	730	April-Sept.	777	94
		640	April-July	669	96
592	Clackamas above Three Lynx	550	April-Sept.	599	92
		465	April-July	507	92
534	McKenzie at McKenzie Bridge	650	April-Sept.	565	115
		500	April-July	430	116
535	McKenzie near Vida	1390	April-Sept.	1195	116
		1140	April-July	978	116
598	Oak Grove Fork above Power Intake	173	April-Sept.	186	93
		135	April-July	145	93
5215	Row near Dorena	97	April-Sept.	101	96
		92	April-July	96	96
554	Santiam, North at Mehama <sup>c</sup>	915	April-Sept.	842	109
		820	April-July	748	110
5516	Santiam, South at Waterloo	560	April-Sept.	558	100
		525	April-July	525	100
5117	Willamette, Mid. Fork below North Fork	890	April-Sept.	798	111
	near Oakridge	785	April-July	705	111
516	Willamette at Salem	5000	April-Sept.	4355	114
		4400	April-July	3863	114

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. **Report delayed.**

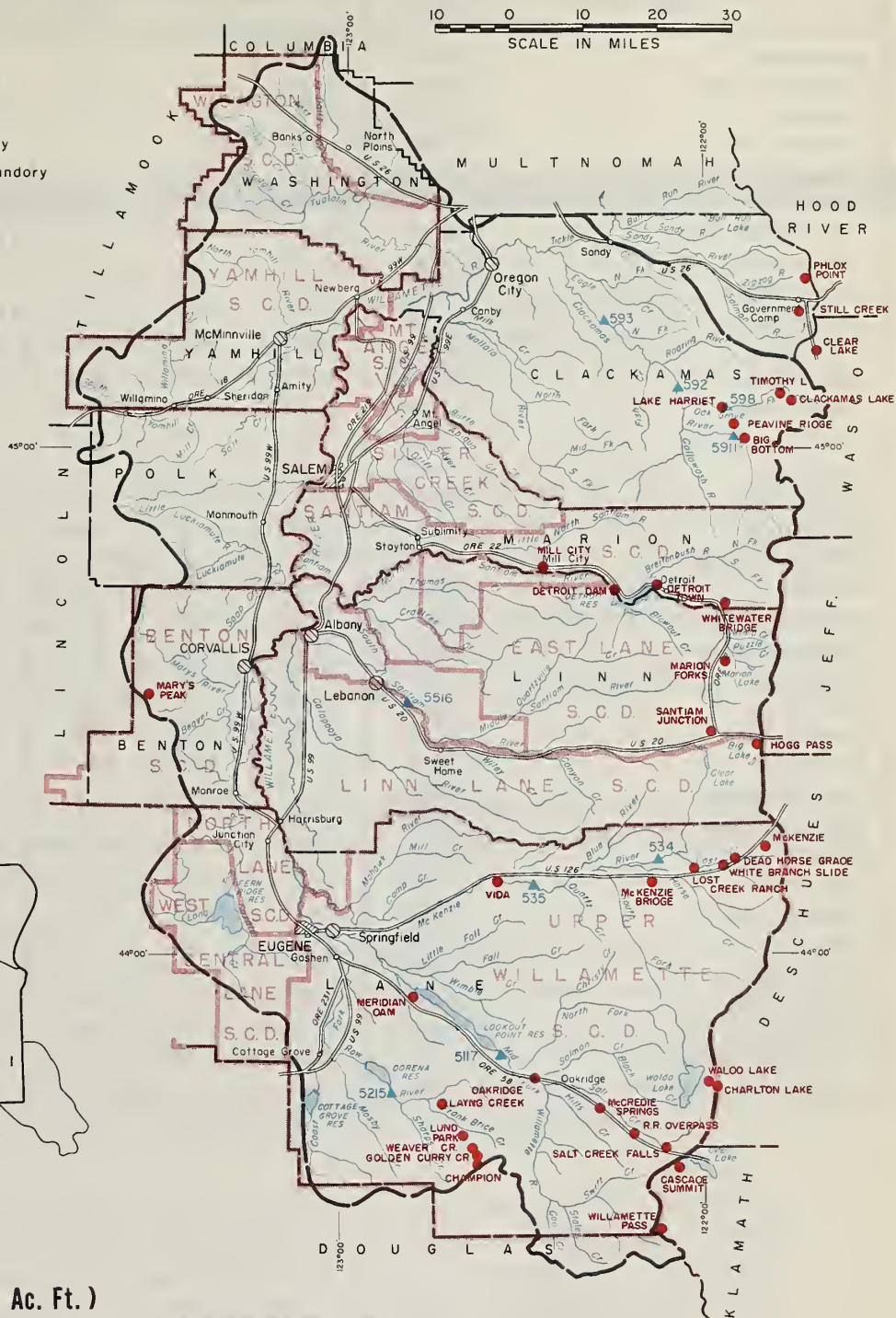
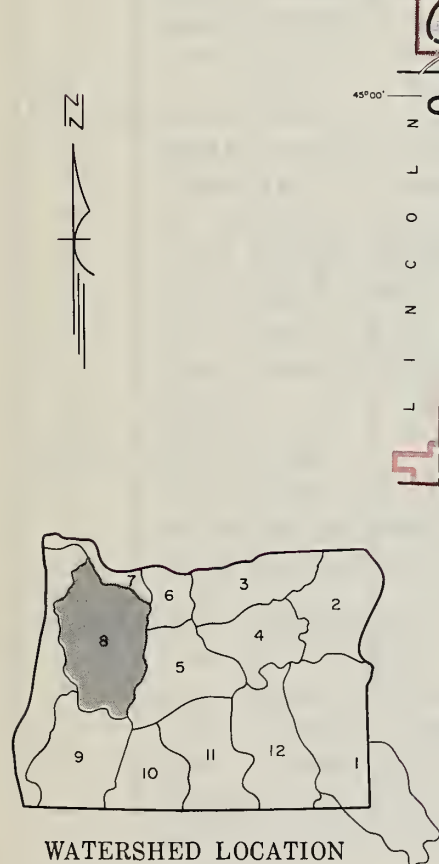


# WILLAMETTE WATERSHEDS

## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- - - S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course

10 0 10 20 30  
SCALE IN MILES



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Cottage Grove	30.1 *	7.5	27.4	7.3**
Detroit	340.0 *	124.7	115.0	--
Doreno	70.5 *	16.8	67.2	--
Fern Ridge	94.2 *	46.2	59.9	29.3***
Lookout Point	350.0 *	115.6	232.9	--

Correction:

For East Lane S. C. D.  
read East Linn S. C. D.

\* Storage space reserved for flood control.

\*\*1938-42 excepted

\*\*\*1938-41 excepted



# Willamette Watersheds

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF <sup>c</sup> RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>d</sup>	
Big Bottom	2118	2-28	0	0.0	5.6	--	2
Cascade Summit	4880	2-26	83	28.8	18.8	32.0	8
Champion	4500	2-27	57	21.5	10.3	22.4	14
Charlton Lake	5750	d					
Clackamas Lake	3400	2-27	27	8.9	7.6	14.5	12
Clear Lake	3500	2-24	12	4.8	7.3	13.1	10
Dead Horse Grade	3800	2-25	22	7.5	8.4	--	2
Detroit Town	1600	2-25	0	0.0	0.0	--	3
Detroit Dam	1580	2-25	0	0.0	0.0	--	3
Golden Curry Creek	3136	2-27	6	1.0	0.0	--	3
Hogg Pass	4755	2-25	96	40.5	27.5	39.8	12
Lake Harriet	2045	2-27	0	0.0	0.0	--	2
Layng Creek	1200	2-27	0	0.0	0.0	--	3
Lost Creek Ranch	1746	2-25	0	0.0	0.0	--	0
Lund Park	1740	2-27	0	0.0	0.0	--	3
Marion Forks	2730	2-25	20	9.0	9.6	16.6	12
Marys Peak	3620	2-23	0	0.0	--	--	0
McCredie Springs	2120	2-26	T	T	0.0	--	4
McKenzie	4800	2-25	92	52.6	30.2	--	3
McKenzie Bridge	1372	2-25	0	0.0	0.0	--	2
Meridian Dam	750	2-26	0	0.0	0.0	--	3
Mill City	826	2-25	0	0.0	0.0	--	2
Oakridge	1310	2-26	0	0.0	0.0	--	3
Peavine Ridge	3500	2-28	37	12.6	8.9	16.7	15
Phlox Point	5600	2-26	157	64.3	34.3	53.3	14
Railroad Overpass	2750	2-26	1.5	T	T	--	3
Salt Creek Falls	4000	2-26	22	6.2	6.0	--	3
Santiam Junction	3990	2-25	47	18.0	11.9	23.1	12
Still Creek	3700	2-27	56	17.8	13.8	21.3	15
Timothy Lake	3295	2-27	38	12.3	8.7	--	0
Vida	800	2-25	0	0.0	0.0	--	0
Waldo Lake	5500	d					
Weaver Creek	2440	2-27	0	0.0	0.0	--	2
White Branch Slide	2800	2-25	T	T	4.1	--	2
Whitewater Bridge	2175	2-25	0	0.0	2.3	--	3
Willamette Pass	5600	g					



# WATER SUPPLY OUTLOOK ROGUE, UMPQUA WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

The outlook for irrigation water supplies in the Rogue and Umpqua watersheds remain adequate in spite of the fact that February brought warmer than normal temperatures and rainstorms rather than snow-squalls at moderate and low elevations.

## SNOW-COVER

Water content of the snow, as measured at 21 snow courses, averages 111 percent of the 15 year normal and double that of last year on March 1st. However, most of the watershed area below 4800 feet is below average or completely without snow-cover. Late season water supplies in the streams heading in low or moderate elevations will be dependent upon additional snowfall this month or good rains in early July.

## SOIL-MOISTURE

Watershed soils under the snow-pack appear to be of about average wetness and will therefore favor a satisfactory runoff from snow-melt.

## RESERVOIR STORAGE

The four Rogue reservoirs, Fourmile Lake, Fish Lake, Hyatt and Emigrant Lakes, contain 20 percent less water than last year but the total storage is 151 percent of the 15 year average. Adequate streamflow is in sight to fill all of these reservoirs. However, Hyatt Prairie will just barely fill unless more snow or unusual rains are received.

## STREAMFLOW

Flow of the Rogue at Raygold is forecast at 106 percent of average while the forecast for the North Umpqua below Lake Creek is set at 104 percent of average. The only forecasts departing from this general average condition are those for the Applegate River at 125 percent and for Hyatt Lake inflow estimated at 83 percent.

Report prepared by

W T. Frost and Mones Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Althouse Creek	Average	Fair	Low flow of Rogue at Savage Rapids Dam not expected to fall below 900 c. f. s.
Applegate River, Big	Excellent	Average	
Applegate River, Little	Excellent	Average	
Ashland Creek	Average	Average	
Butte Creek, Little	Average	Average	
Cow Creek	Average	Average	
Deer Creek	Average	Average	
Eagle Point I. D.	Average	Average	
Elk Creek	Average	Average	
Emigrant Creek (above Reservoir)	Average	Fair	
Evans Creek	Average	Average	
Gold Hill I. D.	Average	Average	
Grants Pass I. D.	Average	Average	
Grave Creek	Average	Average	
Illinois River, East Fork	Average	Average	
Illinois River, West Fork	Average	Average	
Medford I. D.	Average	Average	
Neil Creek	Average	Fair	
Red Blanket Creek	Average	Average	
Rogue River	Average	Average	
Rogue River Valley I. D.	Average	Average	
Sucker Creek	Excellent	Average	
Table Rock I. D.	Average	Average	
Talent I. D.	Average	Fair	
Thompson Creek	Excellent	Average	
Wagner Creek	Average	Average	
Williams Creek	Excellent	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

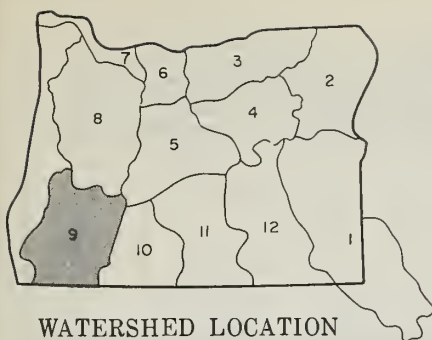
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
7294	Applegate near Copper	145	April - Sept.	116 <sup>g</sup>	125
7420A	Clearwater above Trap Creek <sup>e</sup>	67	April - Sept.	64	105
8321	Fourmile Lake net inflow <sup>e</sup>	7.0	April - Sept.	7.0	100
8320	Hyatt Reservoir net inflow <sup>e</sup>	5.0	April - Sept.	6.0	83
712	Illinois River near Kerby <sup>e</sup>	182	April - Sept.	181	101
7230	Little Butte, North Fork below Fish Lake <sup>e</sup>	14.0	April - Sept.	14.9	94
722	Rogue above Prospect	335	April - Sept.	316	106
		280	April - July	265	106
7217	Rogue, Middle Fork near Prospect <sup>e</sup>	80	April - Sept.	74	108
		63	April - July	58	109
7282	Rogue, South Fork near Prospect <sup>e</sup>	81	April - Sept.	76	107
		70	April - July	65	108
7277	Rogue below South Fork	720	April - Sept.	680	106
		585	April - July	553	106
724	Rogue at Raygold near Central Point	960	April - Sept.	905	106
		800	April - July	760	105
7292	Rogue at Grants Pass	900	April - Sept.	852	106
7419	Umpqua, North Fork below Lake Creek <sup>e</sup>	170	April - Sept.	164	104

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

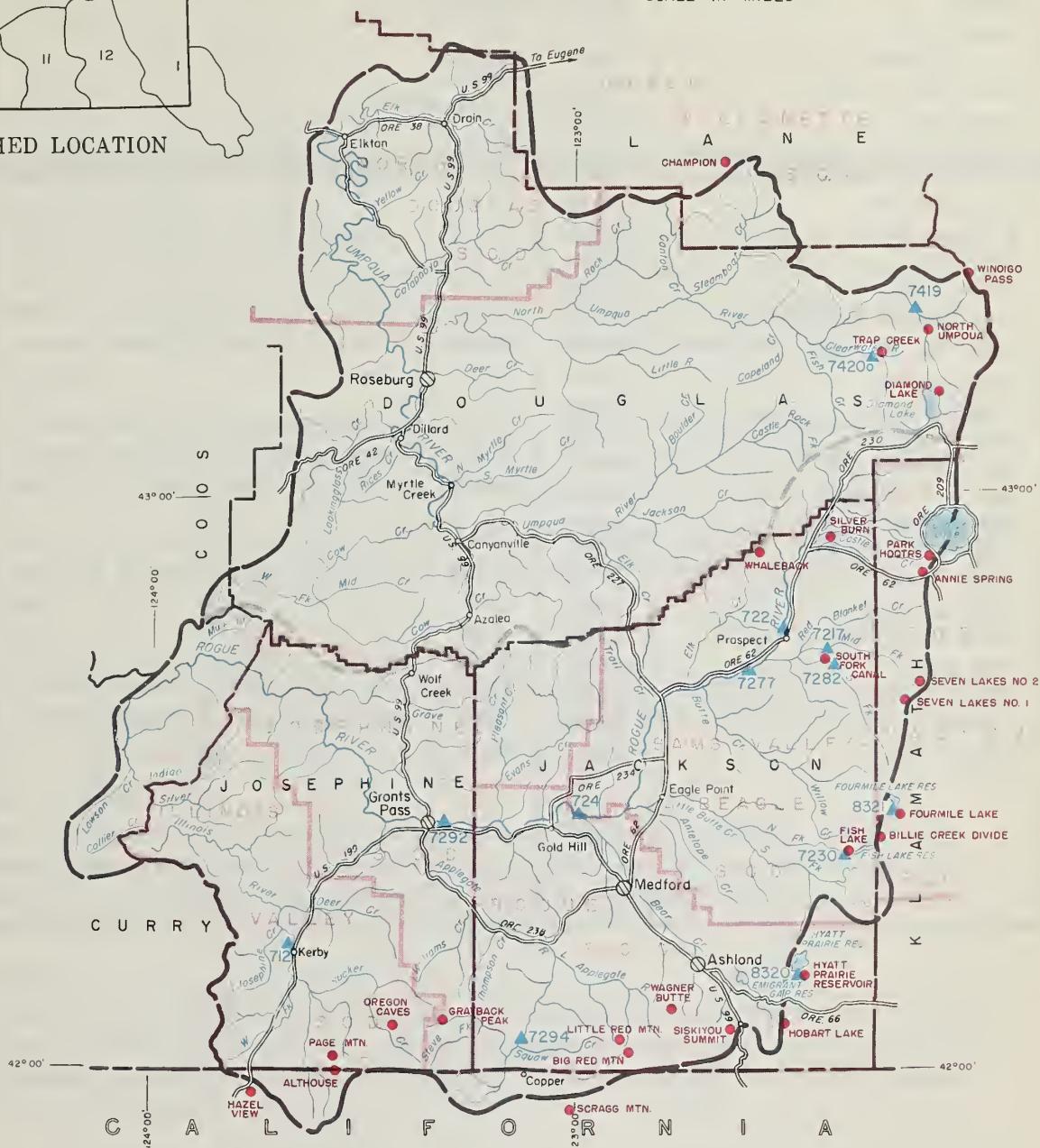
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1938-'39 excepted. <sup>h</sup> Report delayed.



# ROGUE, UMPQUA WATERSHEDS



10 0 10 20 30  
SCALE IN MILES



## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- - - S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course

## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Emigrant Gap	8.3	7.8	8.3	6.4
Fish Lake	7.8	6.0	6.7	4.7
Fourmile Lake	16.1	10.6	16.6	7.0
Hyatt Prairie	16.1	11.3	13.0	5.5



# Rogue, Umpqua Watersheds

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Althouse	4530	2-21	0	0.0	0.5	5.0	13
Annie Spring	6018	2-26	131	47.0	26.2	39.8	15
Big Red Mountain	6500	2-22	77	31.6	15.5	--	4
Billie Creek Divide	5300	2-25	68	26.2	10.1	20.6	14
Champion	4500	2-27	57	21.5	10.3	22.4	14
Diamond Lake	5315	2-24	56	22.9	11.7	20.3	15
Fish Lake	4865	2-22	28	13.1	T	10.1	13
Fourmile Lake	6000	2-25	83	30.8	12.0	--	1
Grayback Peak	6000	3-2	70	28.9	11.6	19.7	11
Hazel View	2500	2-21	0	0.0	0.0	--	0
Hobart Lake	5010	h					
Hyatt Prairie Reservoir	4900	2-24	14	5.6	--	9.4	15
Little Red Mountain	6500	2-23	67	27.2	12.7	--	4
North Umpqua	4215	2-23	33	11.7	3.4	--	1
Oregon Caves	4000	h					
Page Mountain	4045	2-21	0	0.0	0.0	--	0
Park Headquarters	6450	2-26	164	58.5	36.6	54.4	9
Scragg Mountain	6200	2-16	86	37.9	14.7	25.4	10
Seven Lakes No. 1	6800	h					
Seven Lakes No. 2	6200	h					
Silver Burn	3720	2-25	36	12.8	4.1	11.4	15
Siskiyou Summit	4630	2-27	8	2.0	0.0	6.6	15
South Fork Canal	3500	2-25	T	T	0.0	3.7	15
Trap Creek	3800	2-23	0	0.0	0.0	--	1
Wagner Butte	6900	h					
Whaleback	5140	2-22	91	40.2	16.7	36.9	5
Windigo Pass	5800	h					

*"The Conservation of Water begins with the Snow Survey"*



# WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

**U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION**

## GENERAL OUTLOOK

Irrigation water supplies for Klamath Basin lands in 1958 are assured of being adequate in amount even if March snow accumulation should fall somewhat below normal. Present reservoired water supplies and future runoff to be expected from snow-melt on well wetted watersheds will add up to above normal water supplies.

## SNOW-COVER

Water content of the mountain snow-pack is 114 percent of the 15 year average and more than double that of last year on March 1st. It is significant, however, that the low-elevation areas of the basin have little or no snow.

Usually by this date about 85 percent of the total winter's snow has been accumulated. This year the Klamath Basin already has accumulated 97 percent of a normal winter's snowfall.

## SOIL-MOISTURE

Soils are well wetted throughout the watershed. This includes the soils under the snow-pack. Wet soils under the snow favor a greater runoff since none of the snow-melt water will be required to "prime" the watershed.

## RESERVOIR STORAGE

Water now stored in the three largest reservoirs, Gerber, Clear Lake, and Upper Klamath Lake, is 166 percent of the 15 year average and 119 percent of last year on March 1. Indications are that smaller reservoirs and stock ponds are all well filled or will be filled.

## STREAMFLOW

Forecasts of streamflow for the irrigation season, April through September, are all much above the 15 year average. Inflow to Upper Klamath Lake is expected to be 132 percent of average. Inflows to Gerber and Clear Lake Reservoirs are forecast at 133 and 126 percent of average.

Flow of the Sprague is expected to be 128 percent of average. The forecast for the Williamson River below the Sprague near Chiloquin is set at 132 percent of average.

A new record inflow into Upper Klamath Lake for February was set with 358,200 acre feet reported by COPCO. Flow of most other streams has also been above normal the past month.

Report prepared by \_\_\_\_\_

W T Frost and Mones Borton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Ft. Klamath Valley	Excellent	Average	
Lost River (Clear Lake)	Excellent	Average	
Lost River (Gerber)	Excellent	Average	
Lost River (Willow Reservoir)	Excellent	Average	
Sprague River	Excellent	Average	
Upper Klamath Lake	Excellent	Average	
Williamson River	Excellent	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

NO.	FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
	NAME				
823	Clear Lake Reservoir net inflow <sup>g</sup>	62 115	April - Sept. March-July	49 86	126 134
8215	Gerber Reservoir net inflow <sup>g</sup>	32 65	April - Sept. March-July	24 42	133 155
8421	Sprague near Chiloquin	325	April - Sept.	253	128
832	Upper Klamath Lake net inflow <sup>g</sup>	695 560	April - Sept. April - July	526 424	132 132
8419	Williamson below Sprague River	535 450	April - Sept. April - July	406 340	132 132

## RESERVOIR STORAGE (1,000 Ac. Ft.)

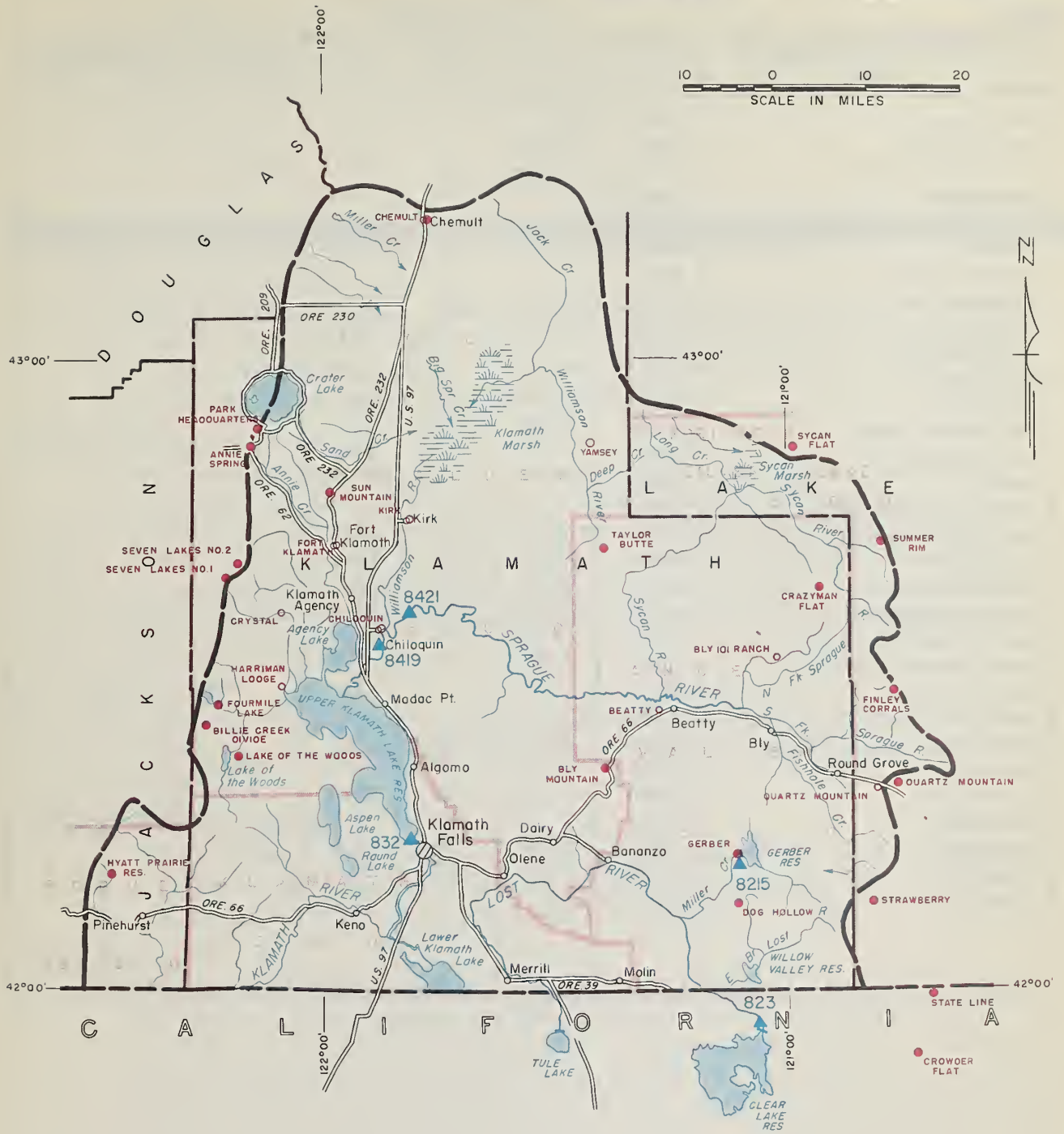
RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Clear Lake	440.2 <sup>h</sup>			
Gerber	94.0			
Upper Klamath Lake	584.0			

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

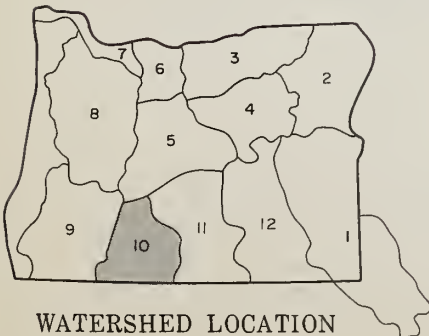
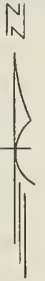
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> From COPCO or U. S. B. R. records of inflow. <sup>h</sup> Flashboards increase capacity to 513.0 <sup>i</sup> Report delayed



# KLAMATH WATERSHEDS



10 0 10 20  
SCALE IN MILES



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course
- COPCO Snow Station



# Klamath Watersheds

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Annie Spring	6018	2-26	131	47.0	26.2	39.8	15
Beatty (Copco)	4300	2-28	0	0.0	0.0	0.1	15
Billie Creek Divide	5300	2-25	68	26.2	10.1	20.6	14
Bly Mountoin	5090	2-26	22	7.9	0.0	--	1
Bly IOI Ranch (Copco)	4800	i					
Chemult	4760	2-25	37	12.8	3.8	11.3	15
Chiloquin (Copco)	4187	i					
Crozyman Flat <sup>f</sup>	6100	2-27	36	13.0	--	--	0
Crowder Flat <sup>f</sup>	5200	2-27	4	1.4	--	3.1	11
Crystal (Copco)	4200	i					
Dog Hollow <sup>f</sup>	4900	2-27	0	0.0	--	--	0
Finley Corrals <sup>f</sup>	6000	2-27	60	21.6	--	--	0
Fort Klomoth (Copco)	4150	2-28	9	2.7	1.6	3.7	15
Fourmile Lake	6000	2-25	83	30.8	12.0	--	1
Gerber	4850	2-28	0	0.0	0.0	--	3
Harriman Lodge (Copco)	4200	i					
Hyatt Prairie Reservoir	4900	2-24	14	5.6	--	9.4	15
Kirk (Copco)	4533	2-28	22	8.5	2.4	5.9	15
Lake of the Woods	4960	2-15	46	14.0	4.0	9.1	15
Park Headquarters	6450	2-26	164	58.5	36.6	54.4	9
Quartz Mountain	5320	2-28	18	6.2	0.0	6.2	14
Quartz Mountoin (Copco)	5504	2-28	21	7.6	0.0	6.7	14
Seven Lakes No.1	6800	i					
Seven Lakes No.2	6200	i					
State Line <sup>f</sup>	5750	2-27	36	13.0	--	--	0
Strawberry	5600	2-27	16	5.8	--	9.2	12
Summer Rim	7200	2-22	54	19.3	9.0	14.1	13
Sun Mountain	5350	2-27	90	33.3	16.5	24.8	15
Sycan Flot <sup>f</sup>	5500	2-27	24	8.6	--	--	0
Taylor Butte	5100	2-27	12	4.3	--	--	1
Yamsey (Copco)	4600	i					



# WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

An adequate water supply outlook for Lake County irrigated lands now seems assured. The Fort Rock-Silver Lake area is particularly short of low-elevation snow but has a better outlook than at this time a year ago.

## SNOW-COVER

Results of surveys on 17 snow courses indicate the water content of the snow-pack is 106 percent of the 15 year average and about 3 times greater than last year at this time. Aerial snow depth observations at eleven locations have played an important part in this month's analysis of snow data. Low elevation snow-cover is absent from most of the county.

## SOIL-MOISTURE

Mountain soils under the snow-pack are well wetted. These well "primed" watersheds favor a good runoff from snow-melt.

## RESERVOIR STORAGE

Drew Creek Reservoir is full and Cottonwood can be easily filled from expected streamflow. Most other small reservoirs and stock ponds are full or will fill later.

## STREAMFLOW

Forecasts of streamflow are all well above average. Drew Creek will discharge nearly enough water to refill the reservoir if it were necessary. Chewaucan River is expected to discharge 110 percent of average in the April-June period. Deep Creek is forecast to flow 116 percent average with Honey and Twenty-Mile Creeks set at 112 and 110 percent average. Levels of Lake County's ancient lakes should rise again this year.

Report prepared by

W. T. Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Chewaucan River	Excellent	Average	{ Most of the low-elevation snow in the Silver Lake vicinity has been melted off.
Crooked Creek	Average	Average	
Deep Creek	Excellent	Average	
Dry Creek	Average	Average	
East Side Goose Lake	Excellent	Average	
Guano Lake	Average	Average	
Honey Creek	Excellent	Average	
Lakeview Water Users Association	Excellent	Average	
Rock Creek	Average	Fair	
Silver-Buck Creeks	Average	Fair ---	
Summer Lake	Excellent	Average	
Thomas Creek	Excellent	Average	
Twentymile Creek	Excellent	Average	
Warner Lakes	Excellent	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
924	Chewaucan near Paisley	80	April -- June	73	110
9127	Deep above Adel	78	April -- June	67	116
814	Drew Reservoir net inflow	d	April -- July	30 <sup>g</sup>	
		47	March -- July	44 <sup>g</sup>	107
9114	Honey near Plush	17.5	April -- June	15.6 <sup>h</sup>	112
916	Twentymile near Adel	23	April -- June	21 <sup>i</sup>	110

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF <sup>c</sup> RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Bald Mountain	6720	i					
Bear Flat Meadow <sup>f</sup>	5900	2-28	36	13.0	--	--	0
Camas Creek	5720	2-25	36	14.1	5.9	10.6	9
Cox Flat <sup>f</sup>	5750	2-27	20	7.2	--	--	0
Crane Mountain <sup>f</sup>	6020	2-28	20	7.2	--	--	0
Crowder Flat <sup>f</sup>	5200	2-27	4	1.4	--	3.1	11
Dismal Swamp <sup>f</sup> (Calif.)	7000	2-28	68	24.5	--	--	0
Finley Corrals <sup>f</sup>	6000	2-27	60	21.6	--	--	0
Hart Mountain <sup>f</sup>	6350	2-28	2	0.7	--	--	0
Mill Creek	6200	2-23	25	9.0	2.5	7.4	13
Quartz Mauntain (COPCO)	5504	2-28	21	7.6	0.0	6.7	14
Quartz Mauntain	5320	2-28	18	6.2	0.0	6.2	14
Sherman Valley <sup>f</sup>	6600	2-28	36	13.0	--	--	0
Silver Creek	4900	2-26	2	1.0	0.0	3.6	12
State Line <sup>f</sup>	5750	2-27	36	13.0	--	--	0
Strawberry	5600	2-27	16	5.8	--	9.2	12
Summer Rim	7200	2-22	54	19.3	9.0	14.1	13
Sycan Flat <sup>f</sup>	5500	2-27	24	8.6	--	--	0

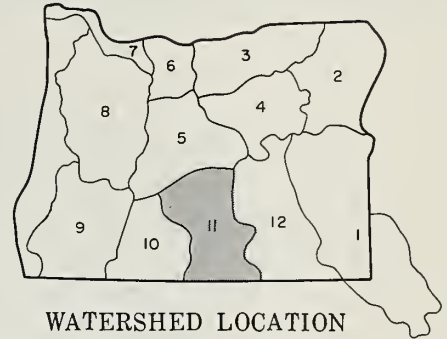
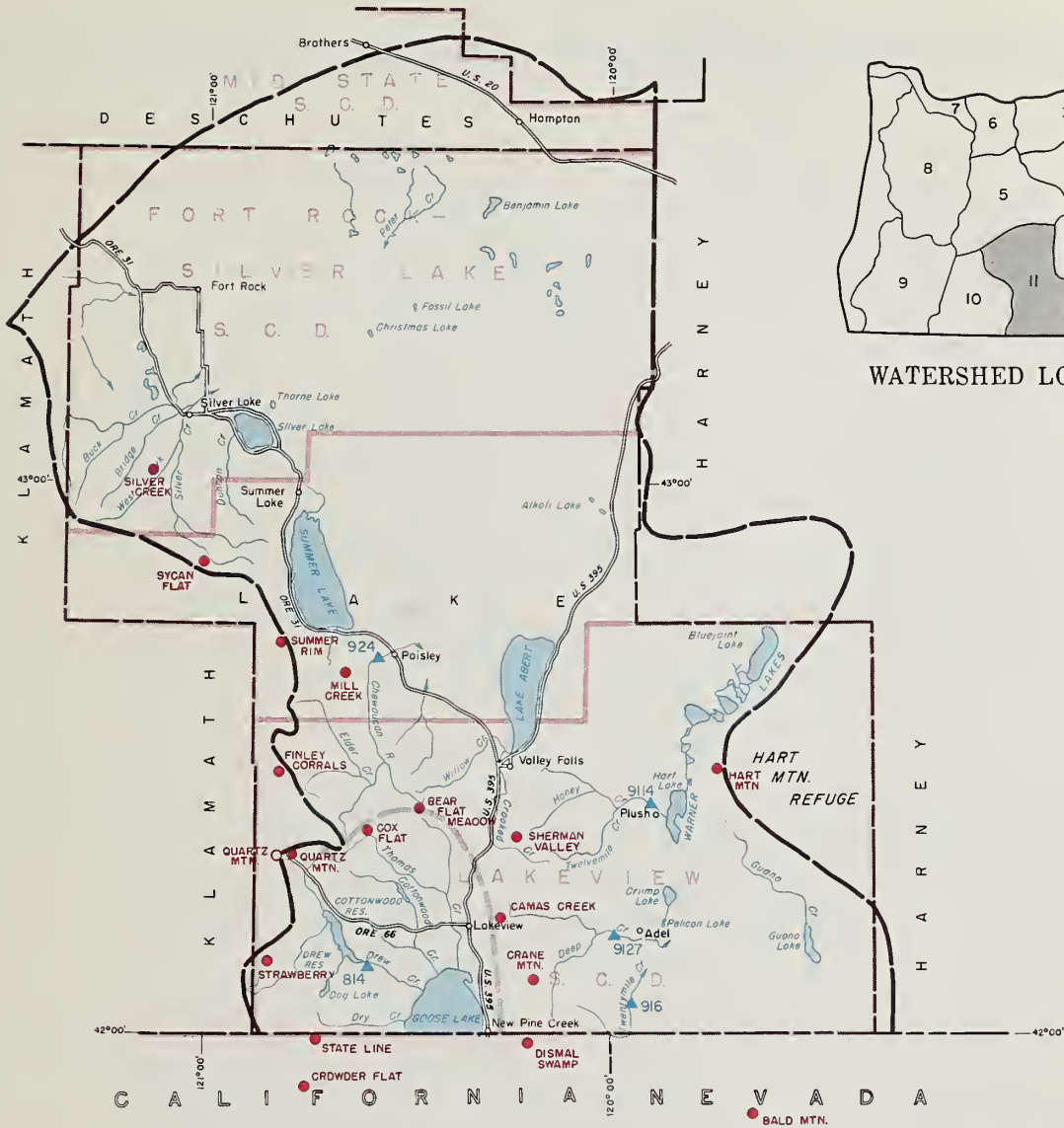
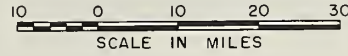
<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1942, '43 and '45 excepted <sup>h</sup> 1942 excepted <sup>i</sup> 1938-'40 excepted.

<sup>i</sup> Report delayed.



# LAKE COUNTY, GOOSE LAKE WATERSHEDS



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Cottonwood	4.1	0.0	3.3	0.6*
Drew	62.5	63.4	59.8	39.0*
*1942 excepted.				

## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course
- COPCO Snow Station







# WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

*as of*  
MARCH 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

The outlook for irrigation water supplies in Harney Basin continues to be adequate except for the probability that late season flow of the small streams east of Burns will be only fair. These smaller streams include Cow, Rattlesnake, Coffeepot, Mill, Soldier, and Prather Creeks.

## SNOW-COVER

Water content of snow, particularly in the north half of the basin, is well above the 15 year average and is double that of last year on March 1st. Snow surveys in the south half, on Steens Mountain, are not scheduled until the last of March but scattered reports indicate the snow is probably about normal there. The lack of low-elevation snow will curtail late season flow on smaller streams.

## SOIL-MOISTURE

Above normal temperatures and rain-storms during February have added more moisture to watershed soils already well wetted. Even in the higher elevations the soils are well wetted under the snow-pack and will favor a satisfactory runoff from melting snow.

## STREAMFLOW

Flow of the Silvies River is forecast at 113 percent of the 15 year average for the April-September period. Silver Creek is expected to produce adequate flows this season for all usual purposes. Near average flows are expected for most other streams in the area. June rains will be needed to extend late season flows of the smaller streams. February brought fairly heavy snow-melt in some sections of the basin.

Report prepared by

W T Frost and Manes Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon



# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Catlow Valley	Average	Fair	
Cow Creek	Average	Average	
Donner und Blitzen River	Average	Average	
Mill - Coffeepot Creeks	Average	Fair	
Rattlesnake Creek	Average	Fair	
Silver Creek	Average	Average	
Silvies River	Excellent	Average	
Soldier - Prather Creek	Average	Fair	
Trout Creek	Average	Average	
Whitehorse Creek	Average	Average	

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
953	Donner und Blitzen near Frenchglen	d	April - Sept.	66	
966	Silvies near Burns	115	April - Sept.	102	113
974	Trout near Denio	d	April - Sept.	9.6	

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Blue Mountain Springs	5900	2-21	56	19.5	11.8	14.9	15
Delintment Lake	5600	d					
Disaster Peak	6500	g					
Emigrant Butte	5000	d					
Fish Creek	7900	d					
Hart Mountain <sup>f</sup>	6350	2-28	2	0.7	--	--	0
Idlewild Camp	5200	2-25	17	6.5	1.4	6.0	15
Izee Summit	5293	2-24	31	10.9	5.0	8.2	15
Lake Creek	5120	2-19	47	15.8	7.1	10.7	14
Rock Spring	5100	2-25	22	7.3	2.5	6.3	15
Silvies	6900	d					
Snow Mountain	6300	d					
Starr Ridge	5150	2-24	19	6.4	3.3	5.8	15
Stinking Water	4800	2-25	8	2.1	--	4.7	14

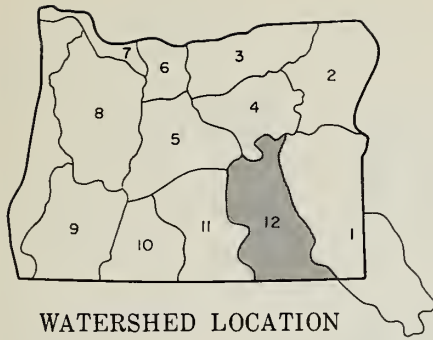
<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

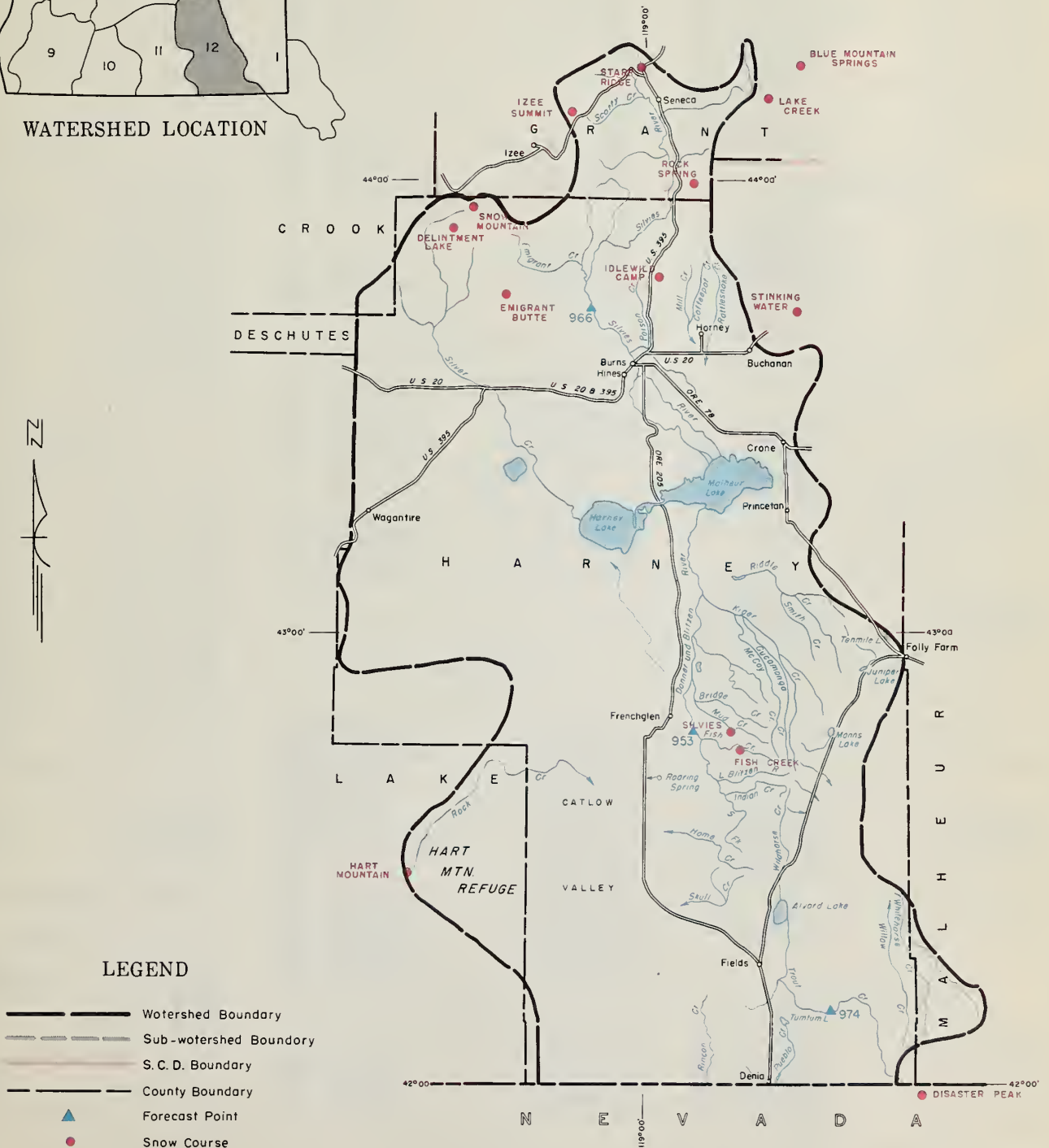
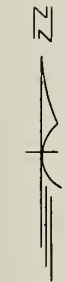
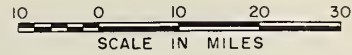
<sup>g</sup> Report delayed.



# HARNEY BASIN WATERSHEDS



WATERSHED LOCATION











Name				Location	Elev	Name				Location	Elev	Name				Location	Elev	
Sec	Twp	Rge		Sec	Twp	Rge		Sec	Twp	Rge		Sec	Twp	Rge		Sec	Twp	Rge
OWYHEE, MALHEUR WATERSHEDS (11)																		
OWYHEE RIVER																		
Antelope Ridge	(Ida)	32	8S	1N	5900	1608	*Nickel Sheep Camp	(Ida)	23	10S	4W	5450						
Barren Valley		26	27S	38E	4200	15H6	Rodeo Flat	(Nev)	36	43N	53E	6800						
Little Creek	(Ida)	10	11S	1E	5700	15H3	76 Creek	(Nev)	6	44N	58E	7100						
Deer Creek	(Nev)	31	46N	52E	7800	17F1	Shumway Ranch	(Ida)	29	23S	39E	4400						
Big Bend	(Nev)	30	45N	56E	6700	16F3	Silver City		6	5S	3W	6400						
Buena Vista, Lower	(Nev)	25	45N	39E	6700	18G1	Silvies		35	32S	32E	6900						
Buena Vista, Upper	(Nev)	21	45N	39E	7200	16G1	South Mountain No. 2	(Ida)	35	7S	5W	6340						
Cliffs	(Ida)	18	9S	5W	5200	15H9	Taylor Canyon	(Nev)	35	39N	53E	6200						
Coaster Peak	(Nev)	8	47N	34E	6500	15H8	Tremewan Ranch	(Nev)	39	39N	55E	5700						
Fish Creek		4	33S	33E	7900	16G4	Triangle	(Ida)	25	7S	3W	5150						
Fox Creek	(Nev)	3	44N	58E	6800	MALHEUR RIVER												
Fry Canyon	(Nev)	31	43N	54E	6700	18E14	Barney Creek		16	14S	36E	5950						
Gold Creek	(Nev)	31	45N	56E	6600	18E16	Blue Mountain Spring		21	15S	35E	5900						
Granton Peak	(Nev)	22	44N	39E	7800	17E3	Bonita		5	16S	40E	4600						
Highway Camp		36	36S	41E	4300	18E21	*Bully Creek		10	17S	37E	5300						
Highway Pasture	(Ida)	31	2S	2W	5800	17E2	Clover Creek		36	16S	39E	5100						
Jack Creek, Lower	(Nev)	18	42N	53E	6800	17F2	*Cottonwood-Indian		10	19S	39E	4320						
Jack Creek, Upper	(Nev)	9	42N	53E	7250	18E19	Crane Prairie		24	16S	34E	5375						
Leary Basin	(Ida)	28	42N	53E	8620	18E20	Eldorado Pass		20	14S	38E	4600						
Martin Creek	(Nev)	19	10S	5W	4800	18E18	Lake Creek		10	16S	34E	5120						
Midia	(Nev)	18	44N	40E	6700	18F1	Rock Spring		23	18S	32E	5100						
Nod Flat	(Nev)	18	39N	46E	7200	17F1	Shumway Ranch		29	23S	39E	4400						
	(Ida)	34	9S	2W	5500	18F4	Stinking Water		33	21S	34E	4800						
BURNED, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (12)																		
BURNED RIVER																		
						18E14	Barney Creek		16	14S	36E	5950						
						18E13	Blue Mountain Summit		6	12S	36E	5098						
						17E1	Doolley Mountain		32	11S	40E	5430						
						18E20	Eldorado Pass		20	14S	38E	4600						
						18E8	Gold Center		21	9S	36E	5340						
						18E9	Tipton		34	10S	35E	5100						
POWDER RIVER																		
						18E1	Anthony Lake		18	7S	37E	7125						
						18E5	Bourne		33	8S	37E	5800						
						17E1	Doolley Mountain		32	11S	40E	5430						
						18E3	Ellerton Meadows		18	8S	38E	5400						
						18E8	Gold Center		21	9S	36E	5340						
						18E6	Goodrich Lake		4	9S	38E	6775						
						18D10	Summit Springs		9	6S	37E	6000						
						17D7	Taylor Green		3	6S	42E	5740						
PINE CREEK																		
						17D8	Schneider Meadows		35	6S	45E	5400						
GRANDE RONDE RIVER																		
						17D1	Aneroid Lake No. 1		16	4S	45E	7400						
						1702	Aneroid Lake No. 2		16	4S	45E	7000						
						18E1	Anthony Lake		18	7S	37E	7100						
						18D9	Beaver Reservoir		8	5S	37E	5300						
						18D11	Camp Carson		33	6S	36E	5900						
						1808	County Line		28	4S	34E	4800						
						18D6	Lucky Strike		28	3S	32E	5000						
						18D5	Meacham		24 & 25	1S	35E	4300						
						17D6	Moss Spring		28	3S	41E	5800						
						18D7	Schoolmarra		48	4S	34E	4700						
						18D10	Summit Springs		9	6S	37E	6000						
						17D7	Taylor Green		3	6S	42E	5700						
						18D3	Tollgate		32	4N	38E	5000						
IMNAHA RIVER																		
						17D1	Aneroid Lake No. 1		16	4S	45E	7400						
						17D2	Aneroid Lake No. 2		16	4S	45E	7000						
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (13)																		
UMATILLA RIVER																		
						19D2	Arbuckle Mountain		33	4S	29E	5400						







The following organizations cooperate in the Oregon Snow Survey work:

STATE

Idaho Cooperative Snow Surveys  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon State Engineer and Corps of State Watermasters  
Oregon State Highway Engineers  
Soil Conservation Districts of Oregon

FEDERAL

Department of Agriculture  
    Cooperative Extension Service  
    Forest Service  
    Soil Conservation Service  
Department of Commerce  
    Weather Bureau  
Department of the Interior  
    Bonneville Power Administration  
    Bureau of Reclamation  
    Fish and Wildlife Service  
    Geological Survey  
    Indian Service  
    National Park Service  
Department of National Defense  
    Corps of Army Engineers

PUBLIC UTILITIES

California-Pacific Utilities Company  
Pacific Power and Light Company  
Portland General Electric Company  
The California Oregon Power Company

MUNICIPALITIES

City of Baker  
City of La Grande  
City of The Dalles  
City of Walla Walla

IRRIGATION DISTRICTS

Associated Ditch Companies  
Central Oregon Irrigation District  
Deschutes County Municipal Improvement District  
East Fork Irrigation District  
Grants Pass Irrigation District  
Jordan Valley Irrigation District  
Lakeview Water Users, Incorporated  
Medford Irrigation District  
North Board of Control - Owyhee Project  
North Unit Irrigation District  
Ochoco Irrigation District  
Rogue River Valley Irrigation District  
South Board of Control - Owyhee Project  
Talent Irrigation District  
Vale-Oregon Irrigation District  
Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company  
The Crag Rats, Hood River, Oregon



Federal - State - Private  
COOPERATIVE SNOW SURVEYS

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Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

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"WATER IS THE WEST'S GREATEST RESOURCE"